

266

370	375	380
Ile Lys Met Glu Glu Ala Gly Asp Glu Ile Val Ser Asn Ala Ile Ser 385 390 395 400		
Tyr Ala Leu Tyr Lys Ala Phe Ser Thr Ser Glu Gln Asp Lys Asp Asn 405 410 415		
Trp Asn Gly Gln Leu Lys Leu Leu Leu Glu Trp Asn Gln Leu Asp Leu 420 425 430		
Ala Asn Asp Glu Ile Phe Thr Asn Asp Arg Arg Trp Glu Ser Ala Asp 435 440 445		
Leu Gln Glu Val Met Phe Thr Ala Leu Ile Lys Asp Arg Pro Lys Phe 450 455 460		
Val Arg Leu Phe Leu Glu Asn Gly Leu Asn Leu Arg Lys Phe Leu Thr 465 470 475 480		
His Asp Val Leu Thr Glu Leu Phe Ser Asn His Phe Ser Thr Leu Val 485 490 495		
Tyr Arg Asn Leu Gln Ile Ala Lys Asn Ser Tyr Asn Asp Ala Leu Leu 500 505 510		
Thr Phe Val Trp Lys Leu Val Ala Asn Phe Arg Arg Gly Phe Arg Lys 515 520 525		
Glu Asp Arg Asn Gly Arg Asp Glu Met Asp Ile Glu Leu His Asp Val 530 535 540		
Ser Pro Ile Thr Arg His Pro Leu Gln Ala Leu Phe Ile Trp Ala Ile 545 550 555 560		
Leu Gln Asn Lys Lys Glu Leu Ser Lys Val Ile Trp Glu Gln Thr Arg 565 570 575		
Gly Cys Thr Leu Ala Ala Leu Gly Ala Ser Lys Leu Leu Lys Thr Leu 580 585 590		
Ala Lys Val Lys Asn Asp Ile Asn Ala Ala Gly Glu Ser Glu Glu Leu 595 600 605		
Ala Asn Glu Tyr Glu Thr Arg Ala Val Glu Leu Phe Thr Glu Cys Tyr 610 615 620		
Ser Ser Asp Glu Asp Leu Ala Glu Gln Leu Leu Val Tyr Ser Cys Glu 625 630 635 640		
Ala Trp Gly Gly Leu Glu His His His His His His 645 650		

&lt;210&gt; 676

&lt;211&gt; 132

&lt;212&gt; PRT

&lt;213&gt; Homo sapien

&lt;400&gt; 676

```

Thr Ala Ala Ser Asp Asn Phe Gln Leu Ser Gln Gly Gly Gln Gly Phe
1      5      10      15
Ala Ile Pro Ile Gly Gln Ala Met Ala Ile Ala Gly Gln Ile Arg Ser
20     25     30
Gly Gly Gly Ser Pro Thr Val His Ile Gly Pro Thr Ala Phe Leu Gly
35     40     45
Leu Gly Val Val Asp Asn Asn Gly Asn Gly Ala Arg Val Gln Arg Val
50     55     60
Val Gly Ser Ala Pro Ala Ala Ser Leu Gly Ile Ser Thr Gly Asp Val
65     70     75     80
Ile Thr Ala Val Asp Gly Ala Pro Ile Asn Ser Ala Thr Ala Met Ala
85     90     95
Asp Ala Leu Asn Gly His His Pro Gly Asp Val Ile Ser Val Asn Trp
100    105    110
Gln Thr Lys Ser Gly Gly Thr Arg Thr Gly Asn Val Thr Leu Ala Glu
115    120    125
Gly Pro Pro Ala
130

```

&lt;210&gt; 677

&lt;211&gt; 36

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; PCR primer

&lt;400&gt; 677

```

ggggaattca tgatcgggga gaattttgcc cactgc
36

```

&lt;210&gt; 678

&lt;211&gt; 33

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; PCR primer

&lt;400&gt; 678

```

gggctcagat caggagtgtg agaccagcct ggc
33

```

&lt;210&gt; 679

&lt;211&gt; 675

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 679

```

atgcataccc atcaccatca caccggccgc tocgataact tccagatgta ccagggtggg 60
cagggtatcg ccattccgat cgggcaggcg atggcgatcg cgggcagat caagcttccc 120

```

```

accgttcata tggggcctac cggcttcctc ggcttgggtg ttgtcgacaa caacggcaac 180
ggcgacagag tccaacgggt ggtcgggagc gctccggcgg caagtctcgg catctccacc 240
ggcgacgtga tcaccggcgt cgacggcgtt ccgatcaact cggccacccg gatggcggac 300
ggcgttaacg ggcattcatc cggtgacgtc atctcgggtg cctggcaaac caagtccggc 360
ggcacgcgtt caggggaacgt gacattggcc gagggacccc cggccgaatt catgatccgg 420
gagaaatttg cccactgcac cgtgctaacc attgcacaca gattgaacac cattattgac 480
agcgacaaga taatggtttt agattcagga agactgaaag aatatgatga gcggtatggt 540
ttgctgcaaa ataaagagag cctattttac aagatgggtc aacaactggg caaggcagaa 600
ggcgtgccc tcactgaacc agcaaacacg agatgggggt tcaccatggt ggcaggctg 660
gtctcaaaact cctga

```

&lt;210&gt; 680

&lt;211&gt; 291

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 680

```

atgggggatac gggagaaatt tgcccactgc accgtgctaa ccattgcaca cagattgaac 60
accattattg acagcgacaa gataatgggt ttgattcag gaagactgaa agaattatgat 120
gagcgtatg ttttgcctga aaataaagag agcctatftt acaagatggt gcaacaactg 180
ggcaaggcag aagcgcgtgc cctcactgaa acagcaaac agagatgggg ttccaccatg 240
ttggccaggg tggctcctcaa ctccctcgag caccaccacc accaccactg a 291

```

&lt;210&gt; 681

&lt;211&gt; 1074

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 681

```

atgtcagcca ttgagagggt gtcagaggca atcgtcagca tccgaagaat ccagaccctt 60
ttgtacttgg atgagatata acagcgcaac cgtcagctgc cgtcagatgg taaaagatg 120
gtgcattgtc aggattttac tgctttttgg gataaggcat cagagacccc aactctacaa 180
ggcctttcct ttactgtcag acctggcgaa ttgttagctg tggteggccc cgtgggagca 240
gggaagtcat cactgttaag tgccgtgctc ggggaattgg ccccaagtc cgggctggtc 300
agcgtgcatg gaagaattgc ctatgtgtct cagcagccct ggggtgtctc gggaaactct 360
aggagttaata ttttattttg gaagaaatac gaaaaggaa gatattgaaa agtcataaag 420
gcttgtgctc tgaaaaagga ttacagctg ttggaggatg gtgatctgac tgtgatagga 480
gatcggggaa ccacgtgag tggagggtag aaagcacggg taacccttgc aagagcagtg 540
tatcaagatg ctgacatcta tctcctggac gatcctctca gtgcagtaga tgcggaagtt 600
agcagacact tgttcgaact gtgtatttgt caaatfttgc atgagaagat cacnatttta 660
gtgactcctc agttgcagta cctcaaaagt gcaagtcaga ttctgatatt gaaagatggt 720
aaaatggtgc agaaggggac ttacactgag ttccataaat ctggtataga ttttggctcc 780
cttttaaaaga aggataatga ggaagtgaa caacctccag ttccaggaac tcccacacta 840
aggaatcgta ccttctcaga gtcttcgggt tggctcctaac aatcttctag accctccttg 900
aaagatgggt ctctggagag ccaagataca gagastgtcc cagttacact atcagaggag 960
aacggttctg aaggaaaagt tggttttcag gctataaaga attacttcag agctgggtgt 1020
cactggattg tcttcatttt ccttattctc gagcaccacc accaccacca ctga 1074

```

&lt;210&gt; 682

&lt;211&gt; 224

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 682

Met His His His His His Thr Ala Ala Ser Asp Asn Phe Gln Leu

5

10

15

Ser Gln Gly Gly Gln Gly Phe Ala Ile Pro Ile Gly Gln Ala Met Ala

20	25	30
Ile Ala Gly Gln Ile Lys Leu Pro Thr Val His Ile Gly Pro Thr Ala		
35	40	45
Phe Leu Gly Leu Gly Val Val Asp Asn Asn Gly Asn Gly Ala Arg Val		
50	55	60
Gln Arg Val Val Gly Ser Ala Pro Ala Ala Ser Leu Gly Ile Ser Thr		
65	70	75
Gly Asp Val Ile Thr Ala Val Asp Gly Ala Pro Ile Asn Ser Ala Thr		
85	90	95
Ala Met Ala Asp Ala Leu Asn Gly His His Pro Gly Asp Val Ile Ser		
100	105	110
Val Thr Trp Gln Thr Lys Ser Gly Gly Thr Arg Thr Gly Asn Val Thr		
115	120	125
Leu Ala Glu Gly Pro Pro Ala Glu Phe Met Ile Arg Glu Lys Phe Ala		
130	135	140
His Cys Thr Val Leu Thr Ile Ala His Arg Leu Asn Thr Ile Ile Asp		
145	150	155
Ser Asp Lys Ile Met Val Leu Asp Ser Gly Arg Leu Lys Glu Tyr Asp		
165	170	175
Glu Pro Tyr Val Leu Leu Gln Asn Lys Glu Ser Leu Phe Tyr Lys Met		
180	185	190
Val Gln Gln Leu Gly Lys Ala Glu Ala Ala Ala Leu Thr Glu Thr Ala		
195	200	205
Lys Gln Arg Trp Gly Phe Thr Met Leu Ala Arg Leu Val Ser Asn Ser		
210	215	220

&lt;210&gt; 683

&lt;211&gt; 357

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 683

Met Ser Ala Ile Glu Arg Val Ser Glu Ala Ile Val Ser Ile Arg Arg		
5	10	15
Ile Gln Thr Phe Leu Leu Leu Asp Glu Ile Ser Gln Arg Asn Arg Gln		
20	25	30
Leu Pro Ser Asp Gly Lys Lys Met Val His Val Gln Asp Phe Thr Ala		
35	40	45
Phe Trp Asp Lys Ala Ser Glu Thr Pro Thr Leu Gln Gly Leu Ser Phe		

270

[illegible]

271

<210> 684  
 <211> 96  
 <212> PRT  
 <213> Homo sapiens

<400> 684  
 Met Gly Ile Arg Glu Lys Phe Ala His Cys Thr Val Leu Thr Ile Ala  
                               5                              10                              15  
 His Arg Leu Asn Thr Ile Ile Asp Ser Asp Lys Ile Met Val Leu Asp  
                               20                              25                              30  
 Ser Gly Arg Leu Lys Glu Tyr Asp Glu Pro Tyr Val Leu Leu Gln Asn  
                               35                              40                              45  
 Lys Glu Ser Leu Phe Tyr Lys Met Val Gln Gln Leu Gly Lys Ala Glu  
                               50                              55                              60  
 Ala Ala Ala Leu Thr Glu Thr Ala Lys Gln Arg Trp Gly Phe Thr Met  
                               65                              70                              75                              80  
 Leu Ala Arg Leu Val Ser Asn Ser Leu Glu His His His His His His  
                               85                              90                              95

<210> 685  
 <211> 35  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> PCR primer

<400> 685  
 cgcccatggg gatccgggag aaatttgccc actgc 35

<210> 686  
 <211> 35  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> PCR primer

<400> 686  
 cgccctgagg gagtttgaga ccagcctggc caaca 35

<210> 687  
 <211> 38  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> PCR primer

<400> 687  
gcattggacca tatgtcagcc attgagaggg tgtcagag 38

<210> 688  
<211> 34  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> PCR primer

<400> 688  
ccgctcgaga ataaggaaaa tgaagacaat ccag 34

<210> 689  
<211> 27  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> PCR primer

<400> 689  
gttgaattca tgcacggggcc ccaggtg 27

<210> 690  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> PCR primer

<400> 690  
ccctcgagt cactatggtc tgcctcttga 30

<210> 691  
<211> 915  
<212> DNA  
<213> Homo sapiens

<400> 691  
atgcattcac atcaccatca caaggccggg tccgataact tccagctgtc ccagggtggg 60  
cagggtattcg ccattccgat cgggcaggcg atggogatcg cgggccagat caagcttccc 120  
accgttcata tggggcctac cgccttcctc ggcttgggtg ttgtcgacaa caacggcaac 180  
ggcgcaogag tccaaagcgt ggtcggggag gctccggcgg caagtctogg catctccacc 240  
ggcgacgtga tcaacggcgt cgaaggcgct ccgatcaact cggccaccgc gatggcggac 300  
gogcttaacg ggcattcatc cggtagctgc atctcggtga cctggcaaac caagtcgggc 360  
ggcaccgcta cagggaacgt gacattggcc gagggacccc cggccgaatt catgcacggg 420  
cccaggtgc tggcacgctg ctccaggtgt gcttgccttg ccttggctgc cacctctggg 480  
gggttgctgc tggagggggt ggaacggcca ccaaccttac ccagtcagg aagtggtggg 540  
ccatgttccc acagcctgag tggctgcac ctgatggctg atggagcaaa ggccttagga 600  
aaagcagatg gcccttgccc ctacctttt gttggaagaa ctgatgttcc atgtcctgca 660  
cggagtggg ttggtggctg tgcctccagg tcttgggcgg ccttcgcaga ggtgactggt 720

273

tgctctttgg gacatctttgg ccttgcccag catgcacaaag cctcagtgct actaactgtgc 780  
 tacaaatgga gccatatagg ggaacagagc agccatctca ggagcaaggt gtatgtgtgc 840  
 ttggggggct ccagtccttg cctcaagggt ctatgtcac tgggggttc ttggttgca 900  
 agaggcagac catag 915

&lt;210&gt; 692

&lt;211&gt; 304

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 692

Met His His His His His His Thr Ala Ala Ser Asp Asn Phe Gln Leu  
 5 10 15

Ser Gln Gly Gly Gln Gly Phe Ala Ile Pro Ile Gly Gln Ala Met Ala  
 20 25 30

Ile Ala Gly Gln Ile Lys Leu Pro Thr Val His Ile Gly Pro Thr Ala  
 35 40 45

Phe Leu Gly Leu Gly Val Val Asp Asn Asn Gly Asn Gly Ala Arg Val  
 50 55 60

Gln Arg Val Val Gly Ser Ala Pro Ala Ala Ser Leu Gly Ile Ser Thr  
 65 70 75 80

Gly Asp Val Ile Thr Ala Val Asp Gly Ala Pro Ile Asn Ser Ala Thr  
 85 90 95

Ala Met Ala Asp Ala Leu Asn Gly His His Pro Gly Asp Val Ile Ser  
 100 105 110

Val Thr Trp Gln Thr Lys Ser Gly Gly Thr Arg Thr Gly Asn Val Thr  
 115 120 125

Leu Ala Glu Gly Pro Pro Ala Glu Phe Met His Gly Pro Gln Val Leu  
 130 135 140

Ala Arg Cys Ser Glu Cys Ala Cys Pro Ala Leu Ala Ala Thr Ser Ala  
 145 150 155 160

Gly Val Arg Leu Glu Gly Val Asp Arg Pro Pro Thr Leu Pro Ser Gln  
 165 170 175

Gly Ser Gly Trp Pro Cys Ser His Ser Leu Ser Gly Cys His Leu Met  
 180 185 190

Ala Asp Gly Ala Lys Ala Leu Gly Lys Ala Asp Gly Pro Trp Pro Tyr  
 195 200 205

Leu Phe Val Arg Arg Thr Asp Val Pro Cys Pro Ala Ala Ser Glu Val  
 210 215 220

Gly Gly Cys Ala Pro Ser Ser Trp Arg Ala Leu Ala Glu Val Thr Gly  
 225 230 235 240

Cys Ser Leu Gly Pro Leu Gly Leu Ala Gln His Ala Gln Ala Ser Val  
 245 250 255



274

Leu Leu Leu Cys Tyr Lys Trp Ser His Ile Gly Glu Thr Ser Ser His  
 260 265 270

Leu Arg Ser Lys Val Tyr Ala Ala Phe Gly Gly Ser Ser Pro Cys Leu  
 275 280 285

Lys Gly Leu Met Ser Leu Trp Ala Ser Trp Leu Ser Arg Gly Arg Pro  
 290 295 300

<210> 693  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> PCR primer

<400> 693  
 cgaagtcacg tggaggccag cctc 24

<210> 694  
 <211> 29  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> PCR primer

<400> 694  
 cctgaccgaa ttcattaaact ggctggac 29

<210> 695  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> VARIANT  
 <222> (1)...(166)  
 <223> Xaa = Any Amino Acid

<400> 695  
 Met Gly His His His His His Val Glu Ala Ser Leu Ser Val Arg  
 1 5 10 15  
 His Pro Glu Tyr Asn Arg Pro Leu Leu Ala Asn Asp Leu Met Leu Ile  
 20 25 30  
 Lys Leu Asp Glu Ser Val Ser Glu Ser Asp Thr Ile Arg Ser Ile Ser  
 35 40 45  
 Ile Ala Ser Gln Cys Pro Thr Ala Gly Asn Ser Cys Leu Val Ser Gly  
 50 55 60  
 Trp Gly Leu Leu Ala Asn Gly Arg Met Pro Thr Val Leu Gln Cys Val  
 65 70 75 80  
 Asn Val Ser Val Val Ser Glu Glu Val Cys Ser Lys Leu Tyr Asp Pro

275

	85		90		95
Leu Tyr His	Pro Ser Met Phe Cys Ala Gly Gly Gly Gln Xaa Gln Xaa				
	100		105		110
Asp Ser Cys Asn Gly Asp Ser Gly Gly Pro Leu Ile Cys Asn Gly Tyr					
	115		120		125
Leu Gln Gly Leu Val Ser Phe Gly Lys Ala Pro Cys Gly Gln Val Gly					
	130		135		140
Val Pro Gly Val Tyr Thr Asn Leu Cys Lys Phe Thr Glu Trp Ile Glu					
	145		150		155
Lys Thr Val Gln Ala Ser					160
	165				

&lt;210&gt; 696

&lt;211&gt; 504

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (1)...(504)

&lt;223&gt; n = A,T,C or G

&lt;400&gt; 696

atggggccatc	atcatcatca	tcacgtggag	gccagcctct	ccgtacggca	cccagagtac	60
aacagaccct	tgctcgctaa	cgacctcatg	ctcatcaagt	tggaacgaac	cgtgtccgag	120
tctgacacca	tcgggagcat	cagcattgct	tgcagtgcc	ctaccgcggg	gaactcttgc	180
ctcgtttctg	gctgggtct	gctggcgaa	ggcagaatgc	ctaccgtgct	gcagtgcgtg	240
aaagtgtcgg	tggtgtctga	ggaggtctgc	agtaagctct	atgacccgct	gtaccacccc	300
agcatgttct	gcgcggcg	agggcaana	cagaangact	cctgcaacgg	tgactctggg	360
gggcccctga	tctgcaacgg	gtacttgcag	ggccttgtgt	cttccggaaa	agccccgtgt	420
ggccaagtgt	ggtgcccagg	tgtctacacc	aacctctgca	aattcactga	gtggatagag	480
aaaaccgtcc	aggccagtta	atga				504

&lt;210&gt; 697

&lt;211&gt; 21

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; PCR primer

&lt;400&gt; 697

ctcagggttc	eggagccgg	g	21
------------	-----------	---	----

&lt;210&gt; 698

&lt;211&gt; 35

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; PCR primer

&lt;400&gt; 698

ctatagaatt	cattaccaaa	agctgggct	ccagc	35
------------	------------	-----------	-------	----

&lt;210&gt; 699

<211> 241  
 <212> PRT  
 <213> Homo sapiens

<400> 699

```

Met Gln His His His His His His Leu Arg Val Pro Glu Pro Arg Pro
 1          5          10          15
Gly Glu Ala Lys Ala Glu Gly Ala Ala Pro Pro Thr Pro Ser Lys Pro
 20          25          30
Leu Thr Ser Phe Leu Ile Gln Asp Ile Leu Arg Asp Gly Ala Gln Arg
 35          40          45
Gln Gly Gly Arg Thr Ser Ser Gln Arg Gln Arg Asp Pro Glu Pro Glu
 50          55          60
Pro Glu Pro Glu Pro Glu Gly Gly Arg Ser Arg Ala Gly Ala Gln Asn
 65          70          75          80
Asp Gln Leu Ser Thr Gly Pro Arg Ala Ala Pro Glu Glu Ala Glu Thr
 85          90          95
Leu Ala Glu Thr Glu Pro Glu Arg His Leu Gly Ser Tyr Leu Leu Asp
100          105          110
Ser Glu Asn Thr Ser Gly Ala Leu Pro Arg Leu Pro Gln Thr Pro Lys
115          120          125
Gln Pro Gln Lys Arg Ser Arg Ala Ala Phe Ser His Thr Gln Val Ile
130          135          140
Glu Leu Glu Arg Lys Phe Ser His Gln Lys Tyr Leu Ser Ala Pro Glu
145          150          155          160
Arg Ala His Leu Ala Lys Asn Leu Lys Leu Thr Glu Thr Gln Val Lys
165          170          175
Ile Trp Phe Gln Asn Arg Arg Tyr Lys Thr Lys Arg Lys Gln Leu Ser
180          185          190
Ser Glu Leu Gly Asp Leu Glu Lys His Ser Ser Leu Pro Ala Leu Lys
195          200          205
Glu Glu Ala Phe Ser Arg Ala Ser Leu Val Ser Val Tyr Asn Ser Tyr
210          215          220
Pro Tyr Tyr Pro Tyr Leu Tyr Cys Val Gly Ser Trp Ser Pro Ala Phe
225          230          235          240
Trp
  
```

<210> 700  
 <211> 729  
 <212> DNA  
 <213> Homo sapiens

<400> 700

```

atgcagcattc accaccatca ccacctragg gtcccgaggc cgcggcccgq ggaggcgaaa      60
gcggaggggg cgcgcgcgcc gaccccgccc aagccgctca cgtccttctt catccaggac      120
atcttgccgg agggcgogca ggggcaagge ggccgcacga gcagccagag acagcgcgac      180
ccggagccgg agccagagcc agagccagag ggaggagca gcgcgcgggg ggccagagac      240
gaccagctga gcaccgggccc ccgcgcgcgc ccggatgagg ccagagacgt ggccagagacc      300
gagccagaaa ggcacttggg gtcttaictg ttggactctg aaaacacttc aggcgccttt      360
ccaaaggcttc cccaaacccc taagcagccg cagaagcgtt cccgagctgc cttctccac      420
actcagggtga togagtggga gaggaagttc agccatcaga agtacctgtc ggcccttgaa      480
cgggcccacc tggccaagaa cctcaagctc acggagaccc aagtgaagat atggttccag      540
aacagagcgt ataagactaa gcaaaagcag ctctcctcgg agctgggaga cttggagag      600
cactcctttt tgcgggcccc gaaagaggag gcttctccc ggccctccct ggtctccgtg      660
tataacagct atcttacta cccatacctg cactgcgtgg gcagctggag cccagctttt      720
tggtaatga                                     729
  
```

277

<210> 701  
 <211> 27  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> PCR primer

<400> 701  
 ctactaagcg ctggagtgag ggtacag

27

<210> 702  
 <211> 33  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> PCR primer

<400> 702  
 catcgagaat tcaactactct ctgactagat gtc

33

<210> 703  
 <211> 161  
 <212> PRT  
 <213> Homo sapiens

<400> 703  
 Met Gln His His His His His His Ala Gly Val Arg Asp Gln Gly Gln  
 1 5 10 15  
 Gly Ala Arg Trp Pro His Thr Gly Lys Arg Gly Pro Leu Leu Gln Gly  
 20 25 30  
 Leu Thr Trp Ala Thr Gly Gly His Cys Phe Ser Ser Glu Glu Ser Gly  
 35 40 45  
 Ala Val Asp Gly Ala Gly Gln Lys Lys Asp Arg Ala Trp Leu Arg Cys  
 50 55 60  
 Pro Gln Ala Val Ala Gly Phe Pro Leu Gly Ser Asp Cys Arg Glu Gly  
 65 70 75 80  
 Gly Arg Gln Gly Cys Gly Gly Ser Asp Asp Glu Asp Asp Leu Gly Val  
 85 90 95  
 Ala Pro Gly Leu Ala Pro Ala Trp Ala Leu Thr Gln Pro Pro Ser Gln  
 100 105 110  
 Ser Pro Gly Pro Gln Ser Leu Pro Ser Thr Pro Ser Ser Ile Trp Pro  
 115 120 125  
 Gln Trp Val Ile Leu Ile Thr Glu Leu Thr Ile Pro Ser Pro Ala His  
 130 135 140  
 Gly Pro Pro Trp Leu Pro Asn Ala Leu Glu Arg Gly His Leu Val Arg  
 145 150 155 160  
 Glu

<210> 704  
 <211> 489  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 704

atgcagcatc	accaccatca	ccacgctgga	gtgagggatc	aggggcagg	cgcgagatgg	60
cctcacacag	ggaagagagg	gcccctcctg	cagggcctca	cctgggcccac	aggaggacac	120
tgcttttct	ctgaggagtc	aggagctgtg	gatgggtgctg	gacagaagaa	ggacagggcc	180
tggtctcaggt	gtccagaggc	tgtcgtggc	ttccctttgg	gatcagactg	cagggagggg	240
ggcgaggcag	gttctggggg	gagtgaagat	gaggatgacc	tgggggtggc	tccaggcctt	300
gcccctgcct	gggcctcac	ccagcctccc	tcacagtctc	ctggccctca	gtctctcccc	360
tccactccat	cctccatctg	gcctcagtgg	gtcattctga	tcactgaact	gaccataccc	420
agccctgccc	acggcctccc	atggctcccc	aatgcctgg	agaggggaca	tctagtcaga	480
gagtagtga						489

&lt;210&gt; 705

&lt;211&gt; 132

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 705

Thr	Ala	Ala	Ser	Asp	Asn	Phe	Gln	Leu	Ser	Gln	Gly	Gly	Gln	Gly	Phe
1				5					10					15	
Ala	Ile	Pro	Ile	Gly	Gln	Ala	Met	Ala	Ile	Ala	Gly	Gln	Ile	Arg	Ser
		20						25					30		
Gly	Gly	Gly	Ser	Pro	Thr	Val	His	Ile	Gly	Pro	Thr	Ala	Phe	Leu	Gly
		35					40					45			
Leu	Gly	Val	Val	Asp	Asn	Asn	Gly	Asn	Gly	Ala	Arg	Val	Gln	Arg	Val
		50				55					60				
Val	Gly	Ser	Ala	Pro	Ala	Ala	Ser	Leu	Gly	Ile	Ser	Thr	Gly	Asp	Val
		65				70				75				80	
Ile	Thr	Ala	Val	Asp	Gly	Ala	Pro	Ile	Asn	Ser	Ala	Thr	Ala	Met	Ala
			85						90					95	
Asp	Ala	Leu	Asn	Gly	His	His	Pro	Gly	Asp	Val	Ile	Ser	Val	Asn	Trp
		100						105					110		
Gln	Thr	Lys	Ser	Gly	Gly	Thr	Arg	Thr	Gly	Asn	Val	Thr	Leu	Ala	Gln
		115					120					125			
Gly	Pro	Pro	Ala												
		130													

&lt;210&gt; 706

&lt;211&gt; 31

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; PCR primer

&lt;400&gt; 706

gggggaattca tcaoctatgt gcgcctcttg c

31

&lt;210&gt; 707

&lt;211&gt; 40

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; PCR primer

&lt;400&gt; 707

gggctcgagt cactcgccca cgaataccgt gtaaaacagc

40

&lt;210&gt; 708

&lt;211&gt; 1203

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 708

atgcacaccc atcaccatca cagggccggg tccgataact tccagctgtc ccaggggtggg 60  
 cagggtattc ccattccgat cgggcaggcg atggcgatcg cgggcagat caagcttccc 120  
 accgttctta tggggcctac cgccttctc ggtttgggtg ttgtcgacaa caacggcaac 180  
 ggcgcacgag tccaacgggt ggtcgggagc gctcggcgcg caagtctcgg catctccacc 240  
 ggcgacgtga tcaccggcgt cgaaggcgct ccgataact cggccaccgc gatggcggac 300  
 ggccttaacg ggcacatccc cgggtgacgt atctcgggtg cctggcaaac caagtcgggc 360  
 ggcacggcta caggggaacgt gacattggcc gagggacccc cggccgaatt catcacctat 420  
 gtgcgccttc tgcctgtgga agtgggggtg gagggagaagt tcatgacctt ggtgctgggc 480  
 attggctccg tgcctggcct ggtctgtgtc ccgctcctag gctcagccag tgaccactgg 540  
 cgtggacgct atggccgcgc cgggccttcc atctgggcac tgccttggg catcctgctg 600  
 agcctcttcc tcatcccaag ggcggcctgg ctgcaggggc tgcctgtgcc ggtaccaggg 660  
 cccctggagc tggcactgct cctcctgggc gtggggctgc tggacttctg tggccagggtg 720  
 tgcctcactc cactggagcg cctgctctct gacctcttcc gggaccggga ccactgtcgc 780  
 caggcctact ctgtctatgc ctccatgate agtcttgggg gctgcctggg ctacctcctg 840  
 cctgccattg actgggacac cagtgccttg gccccctacc tgggcaccca ggaggagtgc 900  
 ctctttgggc tgcctaccct catcttcttc acctgcgtag cagccacact gctgggtggt 960  
 gaggaggcag cgtcggggcc caccagagcca gcagaagggc tgcgggccc ctctctgtcg 1020  
 cccactgct gtccatgcgc ggcggccttg gctttccgga acctgggggc cctgcttccc 1080  
 cggctgcacc agctgtgctg ccgcatgccc cgcacctgc gccggctctt cgtggctgag 1140  
 ctgtgcagct ggatggcact catgaccttc acctgtttt acacggattt cgtgggcgag 1200  
 tga 1203

&lt;210&gt; 709

&lt;211&gt; 400

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 709

Met His His His His His His Thr Ala Ala Ser Asp Asn Phe Gln Leu  
 5 10 15  
 Ser Gln Gly Gly Gln Gly Phe Ala Ile Pro Ile Gly Gln Ala Met Ala  
 20 25 30  
 Ile Ala Gly Gln Ile Lys Leu Pro Thr Val His Ile Gly Pro Thr Ala  
 35 40 45  
 Phe Leu Gly Leu Gly Val Val Asp Asn Asn Gly Asn Gly Ala Arg Val  
 50 55 60  
 Gln Arg Val Val Gly Ser Ala Pro Ala Ala Ser Leu Gly Ile Ser Thr  
 65 70 75 80  
 Gly Asp Val Ile Thr Ala Val Asp Gly Ala Pro Ile Asn Ser Ala Thr  
 85 90 95  
 Ala Met Ala Asp Ala Leu Asn Gly His His Pro Gly Asp Val Ile Ser

280

100	105	110
Val Thr Trp Gln Thr Lys Ser Gly Gly Thr Arg Thr Gly Asn Val Thr 115 120 125		
Leu Ala Glu Gly Pro Pro Ala Glu Phe Ile Thr Tyr Val Pro Pro Leu 130 135 140		
Leu Leu Glu Val Gly Val Glu Glu Lys Phe Met Thr Met Val Leu Gly 145 150 155 160		
Ile Gly Pro Val Leu Gly Leu Val Cys Val Pro Leu Leu Gly Ser Ala 165 170 175		
Ser Asp His Trp Arg Gly Arg Tyr Gly Arg Arg Arg Pro Phe Ile Trp 180 185 190		
Ala Leu Ser Leu Gly Ile Leu Leu Ser Leu Phe Leu Ile Pro Arg Ala 195 200 205		
Gly Trp Leu Ala Gly Leu Leu Cys Pro Asp Pro Arg Pro Leu Glu Leu 210 215 220		
Ala Leu Leu Ile Leu Gly Val Gly Leu Leu Asp Phe Cys Gly Gln Val 225 230 235 240		
Cys Phe Thr Pro Leu Glu Ala Leu Leu Ser Asp Leu Phe Arg Asp Pro 245 250 255		
Asp His Cys Arg Gln Ala Tyr Ser Val Tyr Ala Phe Met Ile Ser Leu 260 265 270		
Gly Gly Cys Leu Gly Tyr Leu Leu Pro Ala Ile Asp Trp Asp Thr Ser 275 280 285		
Ala Leu Ala Pro Tyr Leu Gly Thr Gln Gln Glu Cys Leu Phe Gly Leu 290 295 300		
Leu Thr Leu Ile Phe Leu Thr Cys Val Ala Ala Thr Leu Leu Val Ala 305 310 315 320		
Glu Glu Ala Ala Leu Gly Pro Thr Glu Pro Ala Glu Gly Leu Ser Ala 325 330 335		
Pro Ser Leu Ser Pro His Cys Cys Pro Cys Arg Ala Arg Leu Ala Phe 340 345 350		
Arg Asn Leu Gly Ala Leu Leu Pro Arg Leu His Gln Leu Cys Cys Arg 355 360 365		
Met Pro Arg Thr Leu Arg Arg Leu Phe Val Ala Glu Leu Cys Ser Trp 370 375 380		
Met Ala Leu Met Thr Phe Thr Leu Phe Tyr Thr Asp Phe Val Gly Glu 385 390 395 400		

281

<210> 710  
<211> 20  
<212> PRT  
<213> Homo sapiens

<400> 710  
Leu Leu Pro Pro Pro Pro Ala Leu Cys Gly Ala Ser Ala Cys Asp Val  
                    5                    10                    15  
Ser Val Arg Val  
                    20

<210> 711  
<211> 60  
<212> DNA  
<213> Homo sapiens

<400> 711  
ctgctccac ctcacccgcg gctctgggg gctctgctt gtgatgtct cgtacgtgtg 60

<210> 712  
<211> 10  
<212> PRT  
<213> Homo sapiens

<400> 712  
Ala Ser Ala Cys Asp Val Ser Val Arg Val  
                    5                    10

<210> 713  
<211> 30  
<212> DNA  
<213> Homo sapiens

<400> 713  
gctctgctt gtgatgtct cgtacgtgtg 30

<210> 714  
<211> 9  
<212> PRT  
<213> Homo sapiens

<400> 714  
Ala Ser Ala Cys Asp Val Ser Val Arg  
1                    5

<210> 715  
<211> 9  
<212> PRT  
<213> Homo sapiens

<400> 715  
Ser Ala Cys Asp Val Ser Val Arg Val  
                    5

<210> 716  
<211> 27



<212> DNA

<213> Homo sapiens

<400> 716

tctgcctgtg atgtctcctg acgtgtg

27

<210> 717

<211> 19

<212> PRT

<213> Homo sapiens

<400> 717

Gly Ile Gly Pro Val Leu Gly Leu Val Cys Val Pro Leu Leu Gly Ser  
5 10 15

Ala Ser Asp

<210> 718

<211> 19

<212> PRT

<213> Homo sapiens

<400> 718

Val Pro Pro Leu Leu Leu Glu Val Gly Val Glu Glu Lys Phe Met Thr  
5 10 15

Met Val Leu

<210> 719

<211> 19

<212> PRT

<213> Homo sapiens

<400> 719

Met Val Gln Arg Leu Trp Val Ser Arg Leu Leu Arg His Arg Lys Ala  
5 10 15

Gln Leu Leu

<210> 720

<211> 57

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> {1}...(57)

<223> n = A,T,C or G

<400> 720

gggathgggc cagtnytneg nytngtntgy gtnccnytny tnggnwange nwnngay 57

<210> 721  
<211> 57  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc\_feature  
<222> (1)...(57)  
<223> n = A,T,C or G

<400> 721  
gtacacccny tatyntynga rgtnggngtn gargaraart tyatgaenat ggtnytn 57

<210> 722  
<211> 57  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc\_feature  
<222> (1)...(57)  
<223> n = A,T,C or G

<400> 722  
atggtncaam gnynttgggt nwanmgnytn ytmngncaym gnaargcnca rytaytn 57

<210> 723  
<211> 9  
<212> PRT  
<213> Homo sapiens

<400> 723  
Val Leu Gln Cys Val Asn Val Ser Val  
1 5

<210> 724  
<211> 9  
<212> PRT  
<213> Homo sapiens

<400> 724  
Arg Met Pro Thr Val Leu Gln Cys Val  
1 5

<210> 725  
<211> 9  
<212> PRT  
<213> Homo sapiens

<400> 725  
Asn Leu Cys Lys Phe Thr Glu Trp Ile  
1 5

<210> 726  
<211> 9  
<212> PRT

<213> Homo sapiens

<400> 726

Met Leu Ile Lys Leu Asp Glu Ser Val

1 5

<210> 727

<211> 9

<212> PRT

<213> Homo sapiens

<400> 727

Leu Leu Ala Asn Asp Leu Met Leu Ile

1 5

<210> 728

<211> 10

<212> PRT

<213> Homo sapiens

<400> 728

Leu Leu Ala Asn Gly Arg Met Pro Thr Val

1 5 10

<210> 729

<211> 10

<212> PRT

<213> Homo sapiens

<400> 729

Leu Met Leu Ile Lys Leu Asp Glu Ser Val

1 5 10

<210> 730

<211> 10

<212> PRT

<213> Homo sapiens

<400> 730

Val Leu Gln Cys Val Asn Val Ser Val Val

1 5 10

<210> 731

<211> 10

<212> PRT

<213> Homo sapiens

<400> 731

Gly Leu Leu Ala Asn Gly Arg Met Pro Thr

1 5 10

<210> 732

<211> 10

<212> PRT

<213> Homo sapiens

<400> 732

Thr Val Leu Gln Cys Val Asn Val Ser Val

285

1 5 10  
 <210> 733  
 <211> 9  
 <212> PRT  
 <213> Homo sapiens

<400> 733  
 Gly Val Leu Val His Pro Gln Trp Val  
 1 5

<210> 734  
 <211> 9  
 <212> PRT  
 <213> Homo sapiens

<400> 734  
 Val Leu Val His Pro Gln Trp Val Leu  
 1 5

<210> 735  
 <211> 1195  
 <212> DNA  
 <213> Homo sapiens

<400> 735  
 cccgagactca cgggtcaagct aaggcgaaga gtgggtggct gaagccatcc tatatttatag 60  
 aattaatgga aagcagaaaa gacatcacaa accaagaaga actttggaaa atgaagccta 120  
 ggagaaattt agaagaagac gattatttgc ataaggacac gggagagacc agcatgctaa 180  
 aaagaacctgt gotttttgcac ttgcacccaa cagcccatgc tgatgaattt gactgccett 240  
 cagaacttca gcacacacag gaactcttcc cacagtggca cttgccaat aaaatagctg 300  
 ctattatagc atctctgact tttctttaca ctctctgag ggaagtaatt caccctttag 360  
 caacttccca tcacacatat tttataaaaa ttccaatcct ggtcatcaac aaagtcttgc 420  
 caatgggttcc catcactctc ttggcattgg tttacctgcc aggtgtgata gcagcaattg 480  
 tccaacttca taatggaacc aagtataaga agtttccaca ttggttggat aagtggatgt 540  
 taacaagaaa gcagtttggg ctctctcagtt tcttttttgc tgtactgcac gcaatttata 600  
 gctgtcttta cccaatgagg cgatcctaca gatacaagtt gctaaactgg gcataatcac 660  
 aggtccaaca aaataaagaa gatgcctgga ttgagcatga tgtttggaga atggagattt 720  
 atgtgtctct gggaattgtg ggattggcaa tactggctct gttggctgtg acatctatcc 780  
 catctgtgag tgactctttg acatggagag aatttccata tattcagagc aagctaggaa 840  
 ttgtttccct tctactgggc acaatacacg cattgatttt tgcttggaa aagtggatag 900  
 atataaaaca atttgtatgg tatacacctc caacttttat gatagctgtt ttcttccaa 960  
 ttgttgtcct gatattttaa agcatactat tctgccaatg cttgaggaag aagatactga 1020  
 agattagaca tggttgggaa gacgtcacca aatttaacaa aactgagata tgttcccagt 1080  
 tgtagaatta ctgtttacac acatttttgt tcaatattga tatattttat ccccaacatt 1140  
 tcaagtttgt atttgttaast aaatgatta ttcaaggaaa aaaaaaaaaa aaaaa 1195

<210> 736  
 <211> 339  
 <212> PRT  
 <213> Homo sapiens

<400> 736  
 Met Glu Ser Arg Lys Asp Ile Thr Asn Gln Glu Glu Leu Trp Lys Met  
 5 10 15

Lys Pro Arg Arg Asn Leu Glu Glu Asp Asp Tyr Leu His Lys Asp Thr  
 20 25 30  
 Gly Glu Thr Ser Met Leu Lys Arg Pro Val Leu Leu His Leu His Gln  
 35 40 45  
 Thr Ala His Ala Asp Glu Phe Asp Cys Pro Ser Glu Leu Gln His Thr  
 50 55 60  
 Gln Glu Leu Phe Pro Gln Trp His Leu Pro Ile Lys Ile Ala Ala Ile  
 65 70 75 80  
 Ile Ala Ser Leu Thr Phe Leu Tyr Thr Leu Leu Arg Glu Val Ile His  
 85 90 95  
 Pro Leu Ala Thr Ser His Gln Gln Tyr Phe Tyr Lys Ile Pro Ile Leu  
 100 105 110  
 Val Ile Asn Lys Val Leu Pro Met Val Ser Ile Thr Leu Leu Ala Leu  
 115 120 125  
 Val Tyr Leu Pro Gly Val Ile Ala Ala Ile Val Gln Leu His Asn Gly  
 130 135 140  
 Thr Lys Tyr Lys Lys Phe Pro His Trp Leu Asp Lys Trp Met Leu Thr  
 145 150 155 160  
 Arg Lys Gln Phe Gly Leu Leu Ser Phe Phe Phe Ala Val Leu His Ala  
 165 170 175  
 Ile Tyr Ser Leu Ser Tyr Pro Met Arg Arg Ser Tyr Arg Tyr Lys Leu  
 180 185 190  
 Leu Asn Trp Ala Tyr Gln Gln Val Gln Gln Asn Lys Glu Asp Ala Trp  
 195 200 205  
 Ile Glu His Asp Val Trp Arg Met Glu Ile Tyr Val Ser Leu Gly Ile  
 210 215 220  
 Val Gly Leu Ala Ile Leu Ala Leu Leu Ala Val Thr Ser Ile Pro Ser  
 225 230 235 240  
 Val Ser Asp Ser Leu Thr Trp Arg Glu Phe His Tyr Ile Gln Ser Lys  
 245 250 255  
 Leu Gly Ile Val Ser Leu Leu Leu Gly Thr Ile His Ala Leu Ile Phe  
 260 265 270  
 Ala Trp Asn Lys Trp Ile Asp Ile Lys Gln Phe Val Trp Tyr Thr Pro  
 275 280 285  
 Pro Thr Phe Met Ile Ala Val Phe Leu Pro Ile Val Val Leu Ile Phe  
 290 295 300  
 Lys Ser Ile Leu Phe Leu Pro Cys Leu Arg Lys Lys Ile Leu Lys Ile  
 305 310 315 320  
 Arg His Gly Trp Glu Asp Val Thr Lys Ile Asn Lys Thr Glu Ile Cys

325

330

335

Ser Gln Leu

<210> 737  
 <211> 2172  
 <212> DNA  
 <213> Homo sapiens

<400> 737  
 aaaattgaat attgagatac caittetttag tgttacett tttacccaca tgtgtttctg 60  
 aaaaatttgg aattttattc atetttaaaaa ttggaccogg ctttatttac catctttaat 120  
 ccatttttagt actatgggtg agtacatgga attgaagtct ggcttaaate ttcagaaagt 180  
 tatatatcta ttttatatta tttttttgag acagagtctc gctgtgtcac ccaggctgga 240  
 gtgcgggtgac acaatcttgg ctcactgcaa cctctgagtc ccaggttcaa gogataactca 300  
 tgcctcgggc tctgagtag ctgggaactac aggcgtgcat caccacatct ggctaattct 360  
 tttttgtatt tttagtagag acgggggttt actgtggtct ccattctctg acctgtgat 420  
 ccgctgtcct cccaaagtgc tgggattaca ggcattgagc accgcacaca gotgggactg 480  
 ggtaatttat aaagaaaaga ggtttaatga ctacacagtc cgcattgctg gagaggctc 540  
 aggaacttta caatcatggt ggaaggcgaa ggggaagcaa ggcacgtctt acatgggtgc 600  
 aggagagaaac gagtgaaggg ggagactgac acaacttct tttttttgag scaagagtct 660  
 ggccctgttg ccaggctgg agcaattctc ctcccgcta gctcactgca acctctgct 720  
 cacaggttca agcaattctc atgctcagc ctcccgcta gctgggaaca cagggtatga 780  
 ccacacacac tagctaattt ttgtagtitt agtagagatg ggtctcact atgttgcctc 840  
 ggtgtgtcta aaactctctg gctccagcaa tccgctgct ttggcctccc aaagtgtctg 900  
 ggttacaggg ataagccacc acatccagcc tgcacatac ttttaacta tcagggtctc 960  
 tgagaactca tgcactatca caagaatagc atggggaaaa tccccccat aatccaatca 1020  
 cctccacaca ggtctctctc gacacgtggg attgggtggg gacacagagc caaaacgtat 1080  
 cagatgctgc aggggctggg gacactgaga ccaactcagc ctggtgtctc tgtcactctt 1140  
 ctgggctctg tctgtctcca ggacctccct ccccttccat ggtatagaag gaaagtgtct 1200  
 taaggtgcaa attgcacagg aactccttaa gacatacctc atccactcag cagttttagg 1260  
 ttgcagcaa aatggagtgg aaggaacaga aatttctgt gcacctctc ccgtgtctc 1320  
 ogccatatcg gcatctgca tccagagtgg tggactggt acaggctatg aacctacact 1380  
 gatgcggcac caccaccag agtccacggg ttatgttgtt tcacatttac tottgctgtg 1440  
 gtatgtcta taggtttgga cagatgtccg ataactctt ttacattttg gcactcttg 1500  
 gtagctgtc ttgtaggaat ggaactgtct caaagtggag gcaggcagat ccttcagacg 1560  
 ggtatatgga ggcctgtttt cagttgtctt totaattctc tottatcgtt taacctcaaaa 1620  
 tottctctgag gtctcgtctc ettttaaaat ccttgtctac ttgacagcat cactctgaca 1680  
 ctocattgat tctcagcac ctactgacta cagggttagg agtgcaaggg tagaattcat 1740  
 gttttattca tctttgggtc tgtagcaccc agcaaggtgc ttagtaaatg cgcagtaatt 1800  
 gatttgacct ctgaacaaat acacactgta ctaagaatct acacaccgaa agacaaaaac 1860  
 aagacaaatt tgagtgtac aggtgtcacg ctggccactc cactgtgccc tgtgtattcc 1920  
 tctaggtggt taccaggagc tctgccactg catgtccact agtgacgggt tgcctccacc 1980  
 accccagctg ggtagccgct gctctcacat aaggggtcaa attaaattg ccaggaaata 2040  
 attccccggg actttgactt ctcaagagct aagaaggttt gctgagtatt ctggcatgat 2100  
 gtttgggtgt caaacaactg ctggccaaaa atgatgagta tttccccctc ttgctgaaga 2160  
 tgtgctccat ac 2172

<210> 738  
 <211> 2455  
 <212> DNA  
 <213> Homo sapiens

<400> 738  
 cagcttaaaa atggtttctt gaaatcagtg attagcattc actcaccagt acccctaact 60  
 aggggttaggc actggtttgt actctcggga atacaggagt acaccagaat ttatttctgc 120

```

ttattgcttt  tgttgcaaat  gccgtggctt  catctgagga  attctagaat  tcagagggtg  180
tagccctcca  ctctgctgtc  ttgctatctg  ctctcattgc  atccgtttta  cctgcattct  240
gaaagatggt  tctcagggtt  ttctttgacg  attttcttct  tttctgattc  tgacaatggt  300
ttaaactcatt  gtactgtggt  tatcattttc  ctgcatttat  tttacccatc  ttcttttgta  360
acttgctcta  ttgtctttta  atttctgctt  gttcttttat  gctttcaact  tcataaataa  420
catgttttct  caaatctctt  tgtgaattcc  agagaggggc  aggcacgggtg  gctcacatct  480
gtaatcccag  cactttgggg  aggtgagac  ggttgatca  cttaggttca  ggagtttgag  540
accagcctgg  ccaacatggt  gaaatcccg  ttactaaaa  atacaaaaat  taccaggcca  600
tggtgggggg  cgcctgtaat  ccaggtact  cgggaggctg  agggaggaga  atcgttgaa  660
cctgggaggg  tgaggaggga  gaatcgctt  aacccgggag  gcagagggtt  cagtgaaccg  720
agatcatgth  agcctggta  aaacagaga  gattttgctg  caatgtacaa  ggagcaattt  780
aaataaacaa  acaaacaaac  aaacagaga  gattttgctg  caatgtacaa  ggagcaattt  840
gctcctttta  aaaaaataat  ttggccagg  cacagtggct  cacacctgta  atccagcacc  900
tttggaagc  caaggtgggt  ggtatcttt  aggtcaggag  tttagatca  gctggccaa  960
catggtgaaa  cactatctct  attaaaaata  caaaaatgtg  cttaggttgg  tgggtgacat  1020
ctgtaatctc  agcctccgg  atagctggga  ccacaggtat  gcaccaccac  acctagctaa  1080
tttttgtagt  tttagtagag  atggggtctc  actatgttgc  tcagggtggt  ctaaaactcc  1140
tgggtctccg  caatccgct  gcttgccct  cccaaagtgc  tggggttaca  ggcataagcc  1200
accacatcca  gctgcccaca  tactttttaa  ctatcaggtc  tcatgagaac  tcatgacta  1260
tcacaagaat  agcatgggga  aaatccccc  cataatccaa  tcacctccca  ccaggtctcc  1320
tcgacacgt  ggtattgggt  ggggacacag  agccaaaccg  tatcagatgc  tgcaggggct  1380
ggggacactg  agaccactca  gaactggtgt  ctctgtcact  cttctgggct  ctgtctgtct  1440
ccaggacctc  cctcccttc  catggtatag  aaggaaagt  ctgtaaagt  caaatgtcac  1500
aggaactcct  taagacatac  atcatcaact  cagcagtttt  aggttcgcag  caaatggag  1560
tgaaggaaac  agaaatttcc  tgtgacccc  tcccgcctgt  ctccgccata  tggcatcct  1620
gcatecagag  tgggtggact  gttacaggct  atgaacctac  actgatgogg  caccaccacc  1680
cagagtccac  aggttatgtt  ggttcacatt  tactcttget  gtggtatggt  ctataggttt  1740
ggacagatgt  ccgataatcc  tttttacatt  ttggcatcct  tgggtagctc  gtctttagag  1800
aatggacttg  cttcaaagt  gaggcaggca  gatccttcag  aggytatat  ggagccctgt  1860
tttcagttgc  tttctaat  ctctcttctc  gtttacctca  aaatcttct  gaggtctcgc  1920
ttctttttaa  aatccttgc  tactttgcag  catcactctg  acactccatt  gattcctcag  1980
cacctactga  ctadaagggt  aggagtgcac  ggttagaatt  catgttttat  tcatcttttg  2040
gtctgtagca  ccagcaag  tgcacagtaa  atgocagta  attgatttga  cctctgaaca  2100
aatacacact  gtactaagaa  tctacacacc  gaaagacaaa  aacagacaaa  atttgagtgc  2160
tacaggtgtc  acgcttgcca  tcacacatgt  gctgtgtat  tctctaggt  ggttaccagg  2220
agctctgcca  ctgcatgtcc  actagtgaag  ggtcgtctcc  accaccccag  ctgggtagcc  2280
gctgctctca  cataaggggt  ccaattaaaa  ttgocaggaa  taaattcccc  cggactttga  2340
cttctcaaga  gctaagaagg  ttgctgagt  attctggcat  gatgtttggt  gatcaaaaa  2400
ctgctggcca  aaatgatga  gtatttccc  ctcttgcgta  agatgtgctc  catac  2455

```

&lt;210&gt; 739

&lt;211&gt; 2455

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 739

```

cagcttaaaa  atggtttctt  gaaatcagtg  attagcattc  actcaccagt  accctacta  60
aggggtaggg  actggtttgt  actcctggga  atacaggagt  acaccagaat  ttatttctgc  120
ttattgcttt  tgttgcaaat  gccgtggctt  catctgagga  attctagaat  tcagagggtg  180
tagccctcca  ctctgctgtc  ttgctatctg  ctctcattgc  atccgtttta  cctgcattct  240
gaaagatggt  tctcagggtt  ttctttgacg  attttcttct  tttctgattc  tgacaatggt  300
ttaaactcatt  gtactgtggt  tatcattttc  ctgcatttat  tttacccatc  ttcttttgta  360
acttgctcta  ttgtctttta  atttctgctt  gttcttttat  gctttcaact  tcataaataa  420
catgttttct  caaatctctt  tgtgaattcc  agagaggggc  aggcacgggtg  gctcacatct  480
gtaatcccag  cactttgggg  aggtgagac  ggttgatca  cttaggttca  ggagtttgag  540
accagcctgg  ccaacatggt  gaaatcccg  ttactaaaa  atacaaaaat  taccaggcca  600
tggtgggggg  cgcctgtaat  ccaggtact  cgggaggctg  agggaggaga  atcgttgaa  660
cctgggaggg  tgaggaggga  gaatcgctt  aacccgggag  gcagagggtt  cagtgaaccg  720

```

```

agatcatgtt gctgcactcc agcctgggtca acagagcaag actctgcctc aaaaacaaac 780
aataaaacaa aaaaacaaac aaaaacagaga gattttgctg caatgtacaa ggagcaattt 840
gctcctttta aaaaataatt tttaggcagg cccagtggtt caccctgtta atcccagcac 900
tttgggaagc caaggtgggt ggatcatttg aggtcaggag tttagatca gctgggcaaa 960
catggtgaaa cactatctct attaaaaata caaaaatgtg ctcatgtgtg tggtagaat 1020
ctgtaatctc agcctccggt atagctggga ccacagggtat gacccaccac aactagctaa 1080
ttttttagt tttagtagag atgggggtctc actatgttgc tcagggtggt ctaaaactcc 1140
tgggtctcag caatccggtt gacttggtt cccaaagtgc tggggttaca ggcataagcc 1200
accacatcca gcttgcacca tacttttaaa ctatcagggtc tcatgagaac tcatgcacta 1260
tcacaagaat agcatgggga aaatccccc cataatccaa tcacctcca ccagggtctc 1320
tcacacagc gggattgggt ggggacacag agccaaactg tatcagatgc tgcaggggct 1380
ggggacactg agaccactca gacttggtgt ctctgtcact cttctggggt ctgtctgtct 1440
ccaggacctc cctcccttc catgttatag aaggaagtgc ctgtaagggt caaattgcac 1500
aggaactcct taagacatac atcatcact cagcagtttt aggttcgcag caaatggag 1560
tggaggaac agaaatttcc tgtgcacccc tccccgtgt ctccgcata tgggcactc 1620
gcctccagag tgggtgactg gttacagggt atgaacctac actgatggg caccaccacc 1680
cagagtccac aggttatgtt ggttcacatt tactcttgc gtggtatggt ctatagggtt 1740
ggacagatgt ccgataatcc tttttacatt ttggcatcct tgggtagctc gtctttagag 1800
aatggacttg cttcaagtgc gaggcaggca gatccttcag acgggtatat ggagccctgt 1860
tttcagttgc ttttctaatt ctctcttctc gtttacctca aaatcttctc gaggtctcgc 1920
ttccttttaa aatccttgc tactttgcag cctcctctg acactccatt gatcctcag 1980
cacctactga ctacacgggt aggagtgcac gggtagaatt catgttttat tcatctttg 2040
gtctgtagca cccagcaag tgtcagtaa atgcgcagta attgatttga cctctgaaca 2100
aatacacact gtactaagaa tctacacacc gaagacaaa aacaagacaa atttgagtgc 2160
tacagggtgc acgcttggca tcacacatgt cctgtgtat tctctaggt ggttaccagc 2220
agctctgcca ctgcagtgc actagtgcg ggttcgtctc accaccacc ctgggtagcc 2280
gctgctctca cataaggggt ccaattaaaa ttgccaggaa taattccc cggactttga 2340
cttctcaaga gctaaagag ttgtgtggt attctggcat gatgtttggt gatcaaacaa 2400
ctgctggcca aaatgatga gtattcccc ctcttgcgta agatgtgctc catac 2455

```

&lt;210&gt; 740

&lt;211&gt; 62

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 740

```

Met Thr His Ser Ser Ala Trp Leu Glu Arg Pro Gln Glu Thr Tyr Asn
      5                      10                      15

```

```

His Gly Gly Arg Arg Arg Gly Ser Lys Ala Arg Leu Thr Trp Trp Gln
      20                      25                      30

```

```

Glu Arg Thr Ser Glu Gly Gly Asp Cys His Lys Leu Phe Phe Glu
      35                      40                      45

```

```

Thr Arg Val Trp Pro Cys Cys Pro Gly Trp Ser Ala Val Ala
      50                      55                      60

```

&lt;210&gt; 741

&lt;211&gt; 135

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 741

```

Met Val Glu Gly Glu Gly Glu Ala Arg His Val Leu His Gly Gly Arg
      5                      10                      15

```



Arg Glu Arg Val Arg Gly Glu Thr Ala Thr Asn Phe Phe Phe Leu Arg  
                   20                                  25                                  30  
 Gln Glu Ser Gly Pro Val Ala Gln Ala Gly Val Glu Trp His Asp Leu  
                   35                                  40                                  45  
 Ser Ser Leu Gln Pro Leu Pro His Arg Phe Lys Gln Phe Ser Cys Leu  
                   50                                  55                                  60  
 Ser Leu Pro His Ser Trp Asp His Arg Tyr Ala Pro Pro His Leu Ala  
                   65                                  70                                  75                                  80  
 Asn Phe Cys Ser Phe Ser Arg Asp Gly Val Ser Leu Cys Cys Ser Gly  
                                   85                                  90                                  95  
 Trp Ser Lys Thr Pro Gly Leu Gln Gln Ser Ala Cys Leu Gly Leu Pro  
                   100                                  105                                  110  
 Lys Cys Trp Gly Tyr Arg His Lys Pro Pro His Pro Ala Cys His Ile  
                   115                                  120                                  125  
 Leu Leu Asn Tyr Gln Val Ser  
                   130                                  135

<210> 742  
 <211> 77  
 <212> PRT  
 <213> Homo sapiens

<400> 742  
 Met His Tyr His Lys Asn Ser Met Gly Lys Ile Pro Pro Ile Ile Gln  
                                   5                                  10                                  15  
 Ser Pro Pro Thr Arg Ser Pro Pro Thr Arg Gly Ile Gly Trp Gly His  
                   20                                  25                                  30  
 Arg Ala Lys Pro Tyr Gln Met Leu Gln Gly Leu Gly Thr Leu Arg Pro  
                   35                                  40                                  45  
 Leu Arg Pro Gly Val Ser Val Thr Leu Leu Gly Ser Val Cys Leu Gln  
                   50                                  55                                  60  
 Asp Leu Pro Pro Leu Pro Trp Tyr Arg Arg Lys Val Leu  
                   65                                  70                                  75

<210> 743  
 <211> 60  
 <212> PRT  
 <213> Homo sapiens

<400> 743  
 Met Leu Val His Ile Tyr Ser Cys Cys Gly Met Val Tyr Arg Phe Gly  
                                   5                                  10                                  15  
 Gln Met Ser Asp Asn Pro Phe Tyr Ile Leu Ala Ser Leu Gly Ser Ser  
                   20                                  25                                  30

291

Ser Cys Arg Asn Gly Leu Ala Ser Lys Trp Arg Gln Ala Asp Pro Ser  
                   35                                  40                                  45

Asp Gly Tyr Met Glu Pro Cys Phe Gln Leu Leu Phe  
           50                                  55                                  60

&lt;210&gt; 744

&lt;211&gt; 76

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 744

Met Cys Leu Cys Ile Pro Leu Gly Gly Tyr Gln Glu Leu Cys His Cys  
                                   5                                  10                                  15

Met Ser Thr Ser Asp Gly Phe Ala Pro Pro Pro Gln Leu Gly Ser Arg  
                   20                                  25                                  30

Cys Ser His Ile Arg Gly Pro Ile Lys Ile Ala Arg Asn Lys Phe Pro  
                   35                                  40                                  45

Arg Thr Leu Thr Ser Gln Glu Leu Arg Arg Phe Ala Glu Tyr Ser Gly  
           50                                  55                                  60

Met Met Phe Gly Asp Gln Thr Thr Ala Gly Gln Lys  
           65                                  70                                  75

&lt;210&gt; 745

&lt;211&gt; 76

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 745

Met Val Lys Ser Arg Phe Thr Lys Asn Thr Lys Ile Thr Gln Ala Trp  
                                   5                                  10                                  15

Trp Arg Ala Pro Val Ile Pro Gly Thr Arg Glu Ala Glu Gly Gly Glu  
                   20                                  25                                  30

Ser Leu Glu Pro Gly Arg Leu Arg Glu Glu Asn Arg Leu Asn Pro Gly  
                   35                                  40                                  45

Gly Arg Gly Cys Ser Glu Pro Arg Ser Cys Cys Cys Thr Pro Ala Trp  
           50                                  55                                  60

Ser Thr Glu Gln Asp Ser Ala Ser Lys Thr Asn Lys  
           65                                  70                                  75

&lt;210&gt; 746

&lt;211&gt; 80

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 746

Met Leu Leu His Ser Ser Leu Val Asn Arg Ala Arg Leu Cys Leu Lys

292

				5						10						15
Asn	Lys	Gln	Ile	Asn	Lys	Gln	Thr	Asn	Lys	Thr	Glu	Arg	Phe	Cys	Cys	
				20				25					30			
Asn	Val	Gln	Gly	Ala	Ile	Cys	Ser	Phe	Lys	Lys	Ile	Ile	Phe	Gly	Gln	
		35					40					45				
Ala	Gln	Trp	Leu	Thr	Pro	Val	Ile	Pro	Ala	Leu	Trp	Glu	Ala	Lys	Val	
		50				55					60					
Gly	Gly	Ser	Phe	Glu	Val	Arg	Ser	Leu	Arg	Ser	Ala	Trp	Pro	Thr	Trp	
65					70					75					80	

&lt;210&gt; 747

&lt;211&gt; 72

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 747

Met	His	Tyr	His	Lys	Asn	Ser	Met	Gly	Lys	Ile	Pro	Pro	His	Asn	Pro	
				5					10					15		
Ile	Thr	Ser	His	Gln	Val	Ser	Ser	Asp	Thr	Trp	Asp	Trp	Val	Gly	Thr	
			20					25					30			
Gln	Ser	Gln	Thr	Val	Ser	Asp	Ala	Ala	Gly	Ala	Gly	Asp	Thr	Glu	Thr	
		35					40					45				
Thr	Gln	Thr	Trp	Cys	Leu	Cys	His	Ser	Ser	Gly	Leu	Cys	Leu	Ser	Pro	
		50				55					60					
Gly	Pro	Pro	Ser	Pro	Ser	Met	Val									
65					70											

&lt;210&gt; 748

&lt;211&gt; 77

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 748

Met	His	Tyr	His	Lys	Asn	Ser	Met	Gly	Lys	Ile	Pro	Pro	Ile	Ile	Gln	
				5					10					15		
Ser	Pro	Pro	Thr	Arg	Ser	Pro	Pro	Thr	Arg	Gly	Ile	Gly	Trp	Gly	His	
			20					25					30			
Arg	Ala	Lys	Pro	Tyr	Gln	Met	Leu	Gln	Gly	Leu	Gly	Thr	Leu	Arg	Pro	
		35					40					45				
Leu	Arg	Pro	Gly	Val	Ser	Val	Thr	Leu	Leu	Gly	Ser	Val	Cys	Leu	Gln	
		50				55					60					
Asp	Leu	Pro	Pro	Leu	Pro	Trp	Tyr	Arg	Arg	Lys	Val	Leu				
65					70					75						

293

<210> 749  
 <211> 60  
 <212> PRT  
 <213> Homo sapiens

<400> 749  
 Met Leu Val His Ile Tyr Ser Cys Cys Gly Met Val Tyr Arg Phe Gly  
                   5                  10                  15  
 Gln Met Ser Asp Asn Pro Phe Tyr Ile Leu Ala Ser Leu Gly Ser Ser  
                   20                  25                  30  
 Ser Cys Arg Asn Gly Leu Ala Ser Lys Trp Arg Gln Ala Asp Pro Ser  
                   35                  40                  45  
 Asp Gly Tyr Met Glu Pro Cys Phe Gln Leu Leu Phe  
                   50                  55                  60

<210> 750  
 <211> 76  
 <212> PRT  
 <213> Homo sapiens

<400> 750  
 Met Cys Leu Cys Ile Pro Leu Gly Gly Tyr Gln Glu Leu Cys His Cys  
                   5                  10                  15  
 Met Ser Thr Ser Asp Gly Phe Ala Pro Pro Pro Gln Leu Gly Ser Arg  
                   20                  25                  30  
 Cys Ser His Ile Arg Gly Pro Ile Lys Ile Ala Arg Asn Lys Phe Pro  
                   35                  40                  45  
 Arg Thr Leu Thr Ser Gln Glu Leu Arg Arg Phe Ala Glu Tyr Ser Gly  
                   50                  55                  60  
 Met Met Phe Gly Asp Gln Thr Thr Ala Gly Gln Lys  
                   65                  70                  75

<210> 751  
 <211> 2479  
 <212> DNA  
 <213> Homo sapiens

<400> 751  
 gtcataattga acattccaga tacctatcat tactcgatgc tgttgataac agcaagatgg 60  
 ctttgaactc agggtcacca ccagctattg gaccttacta tgaaaaccat ggataccaac 120  
 cggaaaaccc ctatcccgca cagccactg tggccccac tgtctacgag gtgcatecgg 180  
 ctcagtacta cccgtccccc gtgcccragt accccccgag ggtcctgacg caggettcga 240  
 accccgtcgt ctgcacgcag cccaaatccc catccgggac agtgtgcacc tcaagacta 300  
 agaaagcact gtgcataccc ttgaccttg ggaccttcct cgtgggagct gcgtggccg 360  
 ctggcctact ctggaagttc atgggcagca agtgcctcaa ctctgggata gagtgcgact 420  
 cctcaggtac ctgcataaac cctctasct ggtgtgatgg cgtgtcacac tgcgccggcg 480  
 gggaggacga gaatecgtgt gttogcctct accgaccaaa cttcctcctt cagatgtact 540  
 catctcagag gaagtectgg sacctgtgt gccaaagacga ctggaacgag aactacgggc 600

```

gggggggctg cagggacatg ggctataaag ataattttta ctctagccaa ggaatagtgg 660
atgacagggg atccaccagc tttatgaaac tgaacacaag tgccggcaat gtgatatat 720
ataaaaaact gtaccacagt gatgcctgtt ctccaaaagc agtgggtttct ttacgctgtt 780
tagcctggcg ggtcaacttg aactcaagcc gccagagcag gatcgtgggc ggtgagagcg 840
cgctcccggg ggcctggccc tggcaggtca gccctgcacgt ccagaacgtc caogtgtgcg 900
gaggctccat catcaccccc gaggggatcg tgacagccgc ccaactgcgtg gaaaaacctc 960
ttaacaatcc atggcattgg acggcatttg cggggatttt gagacaatct ttcattgtct 1020
atggagccgg ataccaagta caaaaagtga tttctcatcc aaattatgac tccagacca 1080
agaacaatga cattgcctcg atgaagctgc agaagcctct gactttcaac gacctagtga 1140
aacagtggtg tctgcccac ccaggcatga tgcctgcagc agaacagctc tgcctggatt 1200
accggtgggg ggcacacag gagaaagggc agacctcaga agtgcctgac gctgccaaag 1260
tgctctcat tgagacacag agatgcaaca gcagatatgt ctatgacaa ctagcacac 1320
cagccatgat ctgtgcgggc ttctgcagg ggaacgtcga ttcttgccag ggtgacagtg 1380
gagggcctct ggtcacttcg aacaacaata tctggtggct gataggggat acaagctggg 1440
gttttggttg tgcctaaagt tacagaccag gagtgtacgg gaattgtgat gtattcacgg 1500
actggattta tgcacaaatg aaggcaaacg gctaattcac atggtcttcg tcttgacgt 1560
cgttttacaa gaaacaatg gggctgggtt tgcctcccg tgcattgatt actcttagag 1620
atgattcaga ggtcacttca tttttattaa acagtgaact tgcctggtt tggcactctc 1680
tgccatactg tgcaggctgc agtggctccc ctgcccagcc tgcctccctt aacctctgt 1740
ccgcaagggg tgatggccgg ctggttggtg gcactggcgg tcaattgttg aaggaagagg 1800
gttgagagct gccccattg agatcttctt gctgagctct tccaggggc caattttgga 1860
tgagcatgga gctgtcactt ctacagctgt ggtgacttg agatgaaaaa ggagagacat 1920
ggaaggggag acagccaggt ggcacctgca cgggtgccc tctggggcca cttggtagt 1980
tcccagcct acttcacaag gggattttgc tgaagggttc ttagagcctt agcagcctg 2040
gatgtggccc agaaataaag ggaccagccc ttcatgggtg gtgacgtggt agtcacttgt 2100
aaggggaaca gaaacatttt tgttcttatg ggttgagaat atagacagtg ccttggtgc 2160
gaggggaaga attgaaaagg aacttgccct gagcactcct ggtgcaggtc tccacctgca 2220
cattgggtgg ggtcctctgg agggagactc agccttctc ctcatctctc ctgacctgc 2280
tctagcaccc ctggagagtg aatgccctt ggtccctggc agggcgccaa gtttggcacc 2340
atgtcggcct ctccaggtc gatagtcatt ggaatttgag gtccatgggg gaaatcaagg 2400
atgctcagtt taagggtacac tgtttccatg ttatgtttct acacattgat ggtggtgacc 2460
ctgagttcaa agccattct 2479

```

&lt;210&gt; 752

&lt;211&gt; 492

&lt;212&gt; PRF

&lt;213&gt; Homo sapiens

&lt;400&gt; 752

```

Met Ala Leu Asn Ser Gly Ser Pro Pro Ala Ile Gly Pro Tyr Tyr Glu
      5                      10                      15

Asn His Gly Tyr Gln Pro Glu Asn Pro Tyr Pro Ala Gln Pro Thr Val
      20                      25                      30

Val Pro Thr Val Tyr Glu Val His Pro Ala Gln Tyr Tyr Pro Ser Pro
      35                      40                      45

Val Pro Gln Tyr Ala Pro Arg Val Leu Thr Gln Ala Ser Asn Pro Val
      50                      55                      60

Val Cys Thr Gln Pro Lys Ser Pro Ser Gly Thr Val Cys Thr Ser Lys
      65                      70                      75                      80

Thr Lys Lys Ala Leu Cys Ile Thr Leu Thr Leu Gly Thr Phe Leu Val
      85                      90                      95

Gly Ala Ala Leu Ala Ala Gly Leu Leu Trp Lys Phe Met Gly Ser Lys

```

295

100					105					110						
Cys	Ser	Asn	Ser	Gly	Ile	Glu	Cys	Asp	Ser	Ser	Gly	Thr	Cys	Ile	Asn	
115					120					125						
Pro	Ser	Asn	Trp	Cys	Asp	Gly	Val	Ser	His	Cys	Pro	Gly	Gly	Glu	Asp	
130					135					140						
Glu	Asn	Arg	Cys	Val	Arg	Leu	Tyr	Gly	Pro	Asn	Phe	Ile	Leu	Gln	Met	
145					150					155					160	
Tyr	Ser	Ser	Gln	Arg	Lys	Ser	Trp	His	Pro	Val	Cys	Gln	Asp	Asp	Trp	
165					170					175						
Asn	Glu	Asn	Tyr	Gly	Arg	Ala	Ala	Cys	Arg	Asp	Met	Gly	Tyr	Lys	Asn	
180					185					190						
Asn	Phe	Tyr	Ser	Ser	Gln	Gly	Ile	Val	Asp	Asp	Ser	Gly	Ser	Thr	Ser	
195					200					205						
Phe	Met	Lys	Leu	Asn	Thr	Ser	Ala	Gly	Asn	Val	Asp	Ile	Tyr	Lys	Lys	
210					215					220						
Leu	Tyr	His	Ser	Asp	Ala	Cys	Ser	Ser	Lys	Ala	Val	Val	Ser	Leu	Arg	
225					230					235					240	
Cys	Leu	Ala	Cys	Gly	Val	Asn	Leu	Asn	Ser	Ser	Arg	Gln	Ser	Arg	Ile	
245					250					255						
Val	Gly	Gly	Glu	Ser	Ala	Leu	Pro	Gly	Ala	Trp	Pro	Trp	Gln	Val	Ser	
260					265					270						
Leu	His	Val	Gln	Asn	Val	His	Val	Cys	Gly	Gly	Ser	Ile	Ile	Thr	Pro	
275					280					285						
Glu	Trp	Ile	Val	Thr	Ala	Ala	His	Cys	Val	Glu	Lys	Pro	Leu	Asn	Asn	
290					295					300						
Pro	Trp	His	Trp	Thr	Ala	Phe	Ala	Gly	Ile	Leu	Arg	Gln	Ser	Phe	Met	
305					310					315					320	
Phe	Tyr	Gly	Ala	Gly	Tyr	Gln	Val	Gln	Lys	Val	Ile	Ser	His	Pro	Asn	
325					330					335						
Tyr	Asp	Ser	Lys	Thr	Lys	Asn	Asn	Asp	Ile	Ala	Leu	Met	Lys	Leu	Gln	
340					345					350						
Lys	Pro	Leu	Thr	Phe	Asn	Asp	Leu	Val	Lys	Pro	Val	Cys	Leu	Pro	Asn	
355					360					365						
Pro	Gly	Met	Met	Leu	Gln	Pro	Glu	Gln	Leu	Cys	Trp	Ile	Ser	Gly	Trp	
370					375					380						
Gly	Ala	Thr	Gln	Glu	Lys	Gly	Lys	Thr	Ser	Glu	Val	Leu	Asn	Ala	Ala	
385					390					395					400	
Lys	Val	Leu	Leu	Ile	Glu	Thr	Gln	Arg	Cys	Asn	Ser	Arg	Tyr	Val	Tyr	
405					410					415						

296

Asp Asn Leu Ile Thr Pro Ala Met Ile Cys Ala Gly Phe Leu Gln Gly  
 420 425 430

Asn Val Asp Ser Cys Gln Gly Asp Ser Gly Gly Pro Leu Val Thr Ser  
 435 440 445

Asn Asn Asn Ile Trp Trp Leu Ile Gly Asp Thr Ser Trp Gly Ser Gly  
 450 455 460

Cys Ala Lys Ala Tyr Arg Pro Gly Val Tyr Gly Asn Val Met Val Phe  
 465 470 475 480

Thr Asp Trp Ile Tyr Arg Gln Met Lys Ala Asn Gly  
 485 490

<210> 753  
 <211> 683  
 <212> DNA  
 <213> Homo sapiens

<400> 753  
 gtcataattga acattccaga taactatcat tactogatgc tgttgataac agcaagatgg 60  
 ctttgaactc agggtcacca ccagctattg gacattacta tgaaaaccat ggataccacc 120  
 cggaaaaacc ctatcccgca cagcccaactg tggtcaccac tgtctacgag gtgcacccgg 180  
 ctccagtacta cccgtccccc gtgccccagt acgccccgag ggctctgacg caggcttcca 240  
 accccgtcgt ctgcacgcag cccaaatccc catccgggac agtgtgcacc tcaagacta 300  
 agaaagcaact gtgcacaccc ttgacccctgg ggacattcct cgtgggagct gcgctggccg 360  
 ctggcctact ctggaagtgc atgggcagca agtgcctcaa ctctgggata gagtgcgact 420  
 cctcaggtac ctgcacacc cccctcaact ggtgtgatgg cgtgtcacac tgccccggcg 480  
 gggaggacga gaatcgggtg gttagcctct aaggaccaaa ctccatcctt cagatgtact 540  
 catctcagag gaagtccctg caccctgtgt gccaaagcga ctggaacgag aactacgggc 600  
 gggcggcctg cagggacatg ggctataaga ataatttta ctctagccaa ggaatagtgg 660  
 atgacagcgg atccaccagc ttt 683

<210> 754  
 <211> 209  
 <212> PRT  
 <213> Homo sapiens

<400> 754  
 Met Ala Leu Asn Ser Gly Ser Pro Pro Ala Ile Gly Pro Tyr Tyr Glu  
 1 5 10 15  
 Asn His Gly Tyr Gln Pro Glu Asn Pro Tyr Pro Ala Gln Pro Thr Val  
 20 25 30  
 Val Pro Thr Val Tyr Glu Val His Pro Ala Gln Tyr Tyr Pro Ser Pro  
 35 40 45  
 Val Pro Gln Tyr Ala Pro Arg Val Leu Thr Gln Ala Ser Asn Pro Val  
 50 55 60  
 Val Cys Thr Gln Pro Lys Ser Pro Ser Gly Thr Val Cys Thr Ser Lys  
 65 70 75 80  
 Thr Lys Lys Ala Leu Cys Ile Thr Leu Thr Leu Gly Thr Phe Leu Val  
 85 90 95

297

Gly Ala Ala Leu Ala Ala Gly Leu Leu Trp Lys Phe Met Gly Ser Lys  
                   100                  105                  110  
 Cys Ser Asn Ser Gly Ile Glu Cys Asp Ser Ser Gly Thr Cys Ile Asn  
                   115                  120                  125  
 Pro Ser Asn Trp Cys Asp Gly Val Ser His Cys Pro Gly Gly Glu Asp  
                   130                  135                  140  
 Glu Asn Arg Cys Val Arg Leu Tyr Gly Pro Asn Phe Ile Leu Glu Met  
 145                  150                  155                  160  
 Tyr Ser Ser Gln Arg Lys Ser Trp His Pro Val Cys Gln Asp Asp Trp  
                   165                  170                  175  
 Asn Glu Asn Tyr Gly Arg Ala Ala Cys Arg Asp Met Gly Tyr Lys Asn  
                   180                  185                  190  
 Asn Phe Tyr Ser Ser Gln Gly Ile Val Asp Asp Ser Gly Ser Thr Ser  
                   195                  200                  205  
 Phe

<210> 755  
 <211> 27  
 <212> PRT  
 <213> Homo sapiens

<400> 755  
 Val Gly Glu Gly Leu Tyr Gln Gly Val Pro Arg Ala Glu Pro Gly Thr  
   1                  5                  10                  15  
 Glu Ala Arg Arg His Tyr Asp Glu Gly Val Arg  
                   20                  25

<210> 756  
 <211> 35  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> PCR primer

<400> 756  
 ggatccgcgcg ccaccatgtc actttctaga ctgct 35

<210> 757  
 <211> 27  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> PCR primer

<400> 757  
 gtgcactcag ctggaccaca gccgcag 27

<210> 758  
 <211> 34  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> PCR primer



<400> 758  
ggatccggccg ccacccatggg ctgcaggctg ctct 34

<210> 759  
<211> 27  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> PCR primer

<400> 759  
gtcgactcag aaatocctttc tcttgac 27

<210> 760  
<211> 936  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc\_feature  
<222> (3)...()  
<223> n = A,T,C or G

<400> 760  
atgggctgca ggctgntctg ctgtggggtt ctctgtctcc tgggagcggc ccccatggaa 60  
acgggagtta cgcagacacc aagcaccttg gtcctgggaa tgacaaataa gaagtctttg 120  
aaatgtgaac aacatctggg tcatcaagct atgtatttgt acaagcaaag tgctaaqaag 180  
ccactggagc tcatgtttgt ctacagtctt gaagaacggg ttgaaaacaa cagtgtgcca 240  
agtgccttct cactgaatg ccccaacagc tctcacttat tcttcacct acacaccttg 300  
cagccagaag actcggccct gtatctctgc gccagcagcc aagaccggac aagcagctcc 360  
tacgagcagt acttcgggdc gggcaccagg ctacacggtc cagaggacct gaaaaacgtg 420  
ttcccaaccg aggtcgctgt gtttgagcca tcagaagcag agatctccca cacccaaaag 480  
gccacactgg tgtgcctggc cacaggcttc taccocgacc acgtggagct gagctggtgg 540  
gtgaatggga aggaggtgca cagtggggtc agcacagacc cgcagccctt caaggagcag 600  
cccgccctca atgaactcag atactgcctg agcagccgcc tgagggtctc ggccaccttc 660  
tggcagaacc ccgcgaacca ctcccgctgt caagtccagt tctacgggct ctcgagaaat 720  
gacgagtgga cccaggatag ggccaaacct gtcacccaga tgcgcagcgc cagggccttg 780  
ggtagagcag actgtggctt cactccagc tcttaccagc aaggggtcct gtctgccacc 840  
atcctctatg agatcttget agggaaaggcc accttgatat ccgtgctggt cagtgccttc 900  
gtgctgatgg ccattggtcaa gagaaaggat ttctga 936

<210> 761  
<211> 834  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc\_feature  
<222> (1)...()  
<223> n = A,T,C or G

<400> 761  
atgtcaacttt ctagcctget naaggtggtc acagcttcac tgtggctagg acctggcatt 60  
gccagaaga taactcaaac ccacccagga atgttcgtgc aggaaaagga ggctgtgact 120  
ctggactgca catatgacac cagtgatcaa agttatggtc tcttctggtc caagcagccc 180

```

agcagtgggg aatgatttt ttttatttat caggggtctt atgacgagca aatgcaaca 240
gaaggtoctt actcattgaa tttccagaag gcaagaaaat ccgccaacct tgtcatctcc 300
gcttcacaaac tgggggactc agcaatgtat ttctgtgcaa tgagagaggg cgggggagga 360
ggaaacaaac tcacctttgg gacaggcact cagctaaaag tggaaactca tatccagaac 420
cctgaccttg ccgtgtacca gctgagagac tctaaatcca gtgacaagtc tgtctgctta 480
ttcacogatt ttgattctca aacaaatgtg tcacaaagta aggattctga tgtgtatata 540
acagacaaaa ctgtgctaga catgagggtct atggacttca agagcaaacg tgcgtgtggc 600
tggagaaaca aatctgactt tgcattgtga aacgccttca acaacagcct tattccagaa 660
gacaccttct tccccagccc agaaagtctc tgtgatgta agctggctga gaaaagcttt 720
gaaacagata cgaacctaaa ctttcaaaaac ctgtcagtg ttgggttcgg aatctctc 780
ctgaaagtgg ccgggtttta tctgtctcatg acgttgoggc tgtgggtccag ctga 834

```

&lt;210&gt; 762

&lt;211&gt; 311

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; variant

&lt;222&gt; (1)...(311)

&lt;223&gt; Xaa = Any amino acid

&lt;400&gt; 762

```

Met Gly Cys Arg Leu Xaa Cys Cys Ala Val Leu Cys Leu Leu Gly Ala
      5                                10                                15

```

```

Val Pro Met Glu Thr Gly Val Thr Gln Thr Pro Arg His Leu Val Met
      20                                25                                30

```

```

Gly Met Thr Asn Lys Lys Ser Leu Lys Cys Glu Gln His Leu Gly His
      35                                40                                45

```

```

Asn Ala Met Tyr Trp Tyr Lys Gln Ser Ala Lys Lys Pro Leu Glu Leu
      50                                55                                60

```

```

Met Phe Val Tyr Ser Leu Glu Glu Arg Val Glu Asn Asn Ser Val Pro
      65                                70                                75                                80

```

```

Ser Arg Phe Ser Pro Glu Cys Pro Asn Ser Ser His Leu Phe Leu His
      85                                90                                95

```

```

Leu His Thr Leu Gln Pro Glu Asp Ser Ala Leu Tyr Leu Cys Ala Ser
     100                                105                                110

```

```

Ser Gln Asp Arg Thr Ser Ser Ser Tyr Glu Gln Tyr Phe Gly Pro Gly
     115                                120                                125

```

```

Thr Arg Leu Thr Val Thr Glu Asp Leu Lys Asn Val Phe Pro Pro Glu
     130                                135                                140

```

```

Val Ala Val Phe Glu Pro Ser Glu Ala Glu Ile Ser His Thr Gln Lys
     145                                150                                155                                160

```

```

Ala Thr Leu Val Cys Leu Ala Thr Gly Phe Tyr Pro Asp His Val Glu
     165                                170                                175

```

```

Leu Ser Trp Trp Val Asn Gly Lys Glu Val His Ser Gly Val Ser Thr
     180                                185                                190

```

300

Asp Pro Gln Pro Leu Lys Glu Gln Pro Ala Leu Asn Asp Ser Arg Tyr  
 195 200 205  
 Cys Leu Ser Ser Arg Leu Arg Val Ser Ala Thr Phe Trp Gln Asn Pro  
 210 215 220  
 Arg Asn His Phe Arg Cys Gln Val Gln Phe Tyr Gly Leu Ser Glu Asn  
 225 230 235 240  
 Asp Glu Trp Thr Gln Asp Arg Ala Lys Pro Val Thr Gln Ile Val Ser  
 245 250 255  
 Ala Glu Ala Trp Gly Arg Ala Asp Cys Gly Phe Thr Ser Glu Ser Tyr  
 260 265 270  
 Gln Gln Gly Val Leu Ser Ala Thr Ile Leu Tyr Glu Ile Leu Leu Gly  
 275 280 285  
 Lys Ala Thr Leu Tyr Ala Val Leu Val Ser Ala Leu Val Leu Met Ala  
 290 295 300  
 Met Val Lys Arg Lys Asp Phe  
 305 310

&lt;210&gt; 763

&lt;211&gt; 277

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 763

Met Ser Leu Ser Ser Leu Leu Lys Val Val Thr Ala Ser Leu Trp Leu  
 5 10 15  
 Gly Pro Gly Ile Ala Gln Lys Ile Thr Gln Thr Gln Pro Gly Met Phe  
 20 25 30  
 Val Gln Glu Lys Glu Ala Val Thr Leu Asp Cys Thr Tyr Asp Thr Ser  
 35 40 45  
 Asp Gln Ser Tyr Gly Leu Phe Trp Tyr Lys Gln Pro Ser Ser Gly Glu  
 50 55 60  
 Met Ile Phe Leu Ile Tyr Gln Gly Ser Tyr Asp Glu Gln Asn Ala Thr  
 65 70 75 80  
 Glu Gly Arg Tyr Ser Leu Asn Phe Gln Lys Ala Arg Lys Ser Ala Asn  
 85 90 95  
 Leu Val Ile Ser Ala Ser Gln Leu Gly Asp Ser Ala Met Tyr Phe Cys  
 100 105 110  
 Ala Met Arg Glu Gly Ala Gly Gly Gly Asn Lys Leu Thr Phe Gly Thr  
 115 120 125  
 Gly Thr Gln Leu Lys Val Glu Leu Asn Ile Gln Asn Pro Asp Pro Ala  
 130 135 140

301

Val Tyr Gln Leu Arg Asp Ser Lys Ser Ser Asp Lys Ser Val Cys Leu  
145 150 155 160

Phe Thr Asp Phe Asp Ser Gln Thr Asn Val Ser Gln Ser Lys Asp Ser  
165 170 175

Asp Val Tyr Ile Thr Asp Lys Thr Val Leu Asp Met Arg Ser Met Asp  
180 185 190

Phe Lys Ser Asn Ser Ala Val Ala Trp Ser Asn Lys Ser Asp Phe Ala  
195 200 205

Cys Ala Asn Ala Phe Asn Asn Ser Ile Ile Pro Glu Asp Thr Phe Phe  
210 215 220

Pro Ser Pro Glu Ser Ser Cys Asp Val Lys Leu Val Glu Lys Ser Phe  
225 230 235 240

Glu Thr Asp Thr Asn Leu Asn Phe Gln Asn Leu Ser Val Ile Gly Phe  
245 250 255

Arg Ile Leu Leu Leu Lys Val Ala Gly Phe Asn Leu Leu Met Thr Leu  
260 265 270

Arg Leu Trp Ser Ser  
275

&lt;210&gt; 764

&lt;211&gt; 1536

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 764

```

atgtacaacc tgttgctgtc ctacgacaga catggggacc acctgcagcc cctggacctc 60
gtgccccate accaggtctt caccctttt asgttggtg gagtggaggg taacctgtg 120
atgtttcagc acctgatgca gaagcggag cacaccagt ggacgtatg accactgac 180
tcactctct atgacctcac agagatcgac tctcagggg atgagcagtc cctgctggaa 240
cttatcatca ccaccaagaa gggggaggt cgcagatcc tggaccagac gccggtgaag 300
gagctggtga gctcaagtg gaagcgtac gggcggcgt acttctgcat gctgggtgcc 360
atatatctgc tgtacatcat ctgcttcacc atgtgctgca tctaccgccc cctcaaggcc 420
aggaccaata accgcaagag ccccgggac aacacctct tacagcagaa gctacttcag 480
gaagcotaca tgacccctaa ggacgatata cggctggtg gggagctggt gactgtcatt 540
gggctatca tcatcctgct ggtagaggtt ccagacatct tcagaatggg ggtcactcgc 600
ttctttggac agacctcct tgggggccc ttccatgtct tcatcatcac ctatgcttc 660
atggtgctgg tgacctggt gatcggtct atcagtcca gcggggagg ggtacctatg 720
tctttgcac tctgtctggg ctggtgcaac gtcattgtact tggccgagg attccagatg 780
ctaggccct tcacctcat gattcagaag atgattttt ggcacctgat gcgattctgc 840
tggtgatgg ctgtggtcat cctgggcttt gcttcagcct tctatatcat cttccagaca 900
gaggaccccg aggagctagg ccactctac gactacccc tggeectgtt cagcaacctc 960
gagctgttcc ttacctcat cgatggcccc gccactaca acgtggacct gcccttcatt 1020
tacagcatca cctatgctgc cttgcatc ategccacac tgctcatgct caacctctc 1080
attgccatga tgggagacac tcactggcga gtggcccatg agcgggatga gctgtggagg 1140
gcccagattg tggccaccac ggtgatgct gagcggagc tgcctcctg cctgtggcct 1200
cgctccggga tctgggaag ggaatatgg ctgggagacc gctggttctt gccggtggaa 1260
gacaggcaag atctcaacc gcgcggatc caacgatag cacaggcctt ccacacccgg 1320
ggctctgagg atttgacaa agactcagtg gaaaaactag agctgggctg tcccttcagc 1380

```

```

ccccacctgt cccctccctat gccctcagtg tctcgaagta cctcccgcag cagtgcacat 1440
tgggaaaggc ttccgcaagg gccctgagg agagacctgc gtgggataat caacaggggt 1500
ctggaggacg gggagagctg ggaatatcag atctga 1536

```

<210> 765  
 <211> 1533  
 <212> DNA  
 <213> Homo sapiens

```

<400> 765
atgtacaacc tgttgcctgt ctaegacaga catggggacc acctgcagcc cctggacctc 60
gtgccaatcc accaggtgtc cacccttttc aagctggctg gagtggaggg taacctgtg 120
atgtttcagc acctgatgca gaagcggaag cacacctcag ggacgtatcg accactgacc 180
tcgaactctc atgacctcac agagatogac tcttcagggg atgagcagtc cctgctggaa 240
cttatcatca ccaccaagaa gggggaggtt cgcagatcc tggaccagac gccggtgaa 300
gagctgggtg gcttcaggtg gaagcggtac gggcggtcgt acttctgcat gctgggtgcc 360
atatatctgc tgtacatcat ctgcttcacc atgtgctgca tctaccgccc cctcaagccc 420
aggaccaata accgcaagag cccccgggac aacacctctt tacagcagaa gctacttcag 480
gaagcctaca tgacctctaa ggacgatata cggctggtcg gggagctggt gactgtcatt 540
ggggctatca tcatcctgct ggtagaggtt ccagacatct tcagaatggg ggtcactcgc 600
ttctttggac agaccatcct tgggggcccc ttccatgtcc tcatcctcac ctatgccttc 660
atggtgctgg tgacctggt gatgggctc atcagtgcca gcggggaggt ggtacctatg 720
tcctttgac tctgtctgg ctggtgcaac gtcattgtact tcgcccaggg attccagatg 780
ctaggccctc tcaccatcat gattcagaag atgatttttg ggaacctgat gogattctgc 840
tggtgatgg ctgtggtcat cctgggcttt gcttcagcct tctatatcat cttccagaca 900
gaggaccccc aggagctagg ccactctcac gactacccc tggccctggt cagcaccttc 960
gagctgttcc ttaccatcat cgatggcccc gccactaca acgtggacct gcccttcagt 1020
tacagcatca cctatgctgc ctttgcctac atcgccacac tgctcatgct caacctcttc 1080
attgccatga tggcgacac tcactggaga gtggcccatg agcgggatga gctgtggagg 1140
gccagattg tggccaccac ggtgatgctg gaggggaagc tgctcagctg cctgtggcct 1200
cgctccggga tctgcggagc ggagtatggc ctgggagacc gctggttctt gcgggtggaa 1260
gacaggcaag atctcaaccg gcagcggatc caacgctacg cacaggcctt ccacacccgg 1320
ggctctgagg atttgacaa agaactcagtg gaaaaactag agctgggctg tcccttcagc 1380
ccccacctgt cccctccctat gccctcagtg tctcgaagta cctcccgcag cagtgcacat 1440
tgggaaaggc ttccgcaagg gccctgagg agagacctgc gtgggataat caacaggggt 1500
ctggaggacg gggagagctg ggaatatcag atc 1536

```

<210> 766  
 <211> 511  
 <212> PRT  
 <213> Homo sapiens

```

<400> 766
Met Tyr Asn Leu Leu Ser Tyr Asp Arg His Gly Asp His Leu Gln
      5              10              15

Pro Leu Asp Leu Val Pro Asn His Gln Gly Leu Thr Pro Phe Lys Leu
      20              25              30

Ala Gly Val Glu Gly Asn Thr Val Met Phe Gln His Leu Met Gln Lys
      35              40              45

Arg Lys His Thr Gln Trp Thr Tyr Gly Pro Leu Thr Ser Thr Leu Tyr
      50              55              60

Asp Leu Thr Glu Ile Asp Ser Ser Gly Asp Glu Gln Ser Leu Leu Glu
      65              70              75              80

```

303

Leu Ile Ile Thr Thr Lys Lys Arg Glu Ala Arg Gln Ile Leu Asp Gln  
 85 90 95  
 Thr Pro Val Lys Glu Leu Val Ser Leu Lys Trp Lys Arg Tyr Gly Arg  
 100 105 110  
 Pro Tyr Phe Cys Met Leu Gly Ala Ile Tyr Leu Leu Tyr Ile Ile Cys  
 115 120 125  
 Phe Thr Met Cys Cys Ile Tyr Arg Pro Leu Lys Pro Arg Thr Asn Asn  
 130 135 140  
 Arg Thr Ser Pro Arg Asp Asn Thr Leu Leu Gln Gln Lys Leu Leu Gln  
 145 150 155 160  
 Glu Ala Tyr Met Thr Pro Lys Asp Asp Ile Arg Leu Val Gly Glu Leu  
 165 170 175  
 Val Thr Val Ile Gly Ala Ile Ile Ile Leu Leu Val Glu Val Pro Asp  
 180 185 190  
 Ile Phe Arg Met Gly Val Thr Arg Phe Phe Gly Gln Thr Ile Leu Gly  
 195 200 205  
 Gly Pro Phe His Val Leu Ile Ile Thr Tyr Ala Phe Met Val Leu Val  
 210 215 220  
 Thr Met Val Met Arg Leu Ile Ser Ala Ser Gly Glu Val Val Pro Met  
 225 230 235 240  
 Ser Phe Ala Leu Val Leu Gly Trp Cys Asn Val Met Tyr Phe Ala Arg  
 245 250 255  
 Gly Phe Gln Met Leu Gly Pro Phe Thr Ile Met Ile Gln Lys Met Ile  
 260 265 270  
 Phe Gly Asp Leu Met Arg Phe Cys Trp Leu Met Ala Val Val Ile Leu  
 275 280 285  
 Gly Phe Ala Ser Ala Phe Tyr Ile Ile Phe Gln Thr Glu Asp Pro Glu  
 290 295 300  
 Glu Leu Gly His Phe Tyr Asp Tyr Pro Met Ala Leu Phe Ser Thr Phe  
 305 310 315 320  
 Glu Leu Phe Leu Thr Ile Ile Asp Gly Pro Ala Asn Tyr Asn Val Asp  
 325 330 335  
 Leu Pro Phe Met Tyr Ser Ile Thr Tyr Ala Ala Phe Ala Ile Ile Ala  
 340 345 350  
 Thr Leu Leu Met Leu Asn Leu Leu Ile Ala Met Met Gly Asp Thr His  
 355 360 365  
 Trp Arg Val Ala His Glu Arg Asp Glu Leu Trp Arg Ala Gln Ile Val  
 370 375 380  
 Ala Thr Thr Val Met Leu Glu Arg Lys Leu Pro Arg Cys Leu Trp Pro

304

385                      390                      395                      400  
 Arg Ser Gly Ile Cys Gly Arg Glu Tyr Gly Leu Gly Asp Arg Trp Phe  
                          405                      410                      415  
 Leu Arg Val Glu Asp Arg Gln Asp Leu Asn Arg Gln Arg Ile Gln Arg  
                          420                      425                      430  
 Tyr Ala Gln Ala Phe His Thr Arg Gly Ser Glu Asp Leu Asp Lys Asp  
                          435                      440                      445  
 Ser Val Glu Lys Leu Glu Leu Gly Cys Pro Phe Ser Pro His Leu Ser  
                          450                      455                      460  
 Leu Pro Met Pro Ser Val Ser Arg Ser Thr Ser Arg Ser Ser Ala Asn  
                          465                      470                      475                      480  
 Trp Glu Arg Leu Arg Gln Gly Thr Leu Arg Arg Asp Leu Arg Gly Ile  
                          485                      490                      495  
 Ile Asn Arg Gly Leu Glu Asp Gly Gln Ser Trp Glu Tyr Gln Ile  
                          500                      505                      510  
  
 <210> 767  
 <211> 134  
 <212> PRT  
 <213> Homo sapiens  
  
 <400> 767  
 Met Tyr Asn Leu Leu Leu Ser Tyr Asp Arg His Gly Asp His Leu Gln  
    5                      10                      15  
 Pro Leu Asp Leu Val Pro Asn His Gln Gly Leu Thr Pro Phe Lys Leu  
    20                      25                      30  
 Ala Gly Val Glu Gly Asn Thr Val Met Phe Gln His Leu Met Gln Lys  
    35                      40                      45  
 Arg Lys His Thr Gln Trp Thr Tyr Gly Pro Leu Thr Ser Thr Leu Tyr  
    50                      55                      60  
 Asp Leu Thr Glu Ile Asp Ser Ser Gly Asp Glu Gln Ser Leu Leu Glu  
    65                      70                      75                      80  
 Leu Ile Ile Thr Thr Lys Lys Arg Glu Ala Arg Gln Ile Leu Asp Gln  
    85                      90                      95  
 Thr Pro Val Lys Glu Leu Val Ser Leu Lys Trp Lys Arg Tyr Gly Arg  
    100                      105                      110  
 Pro Tyr Phe Cys Met Leu Gly Ala Ile Tyr Leu Leu Tyr Ile Ile Cys  
    115                      120                      125  
 Phe Thr Met Cys Cys Ile  
    130

305

<210> 768  
 <211> 55  
 <212> PRT  
 <213> Homo sapiens

<400> 768  
 Ala Tyr Arg Pro Leu Lys Pro Arg Thr Asn Asn Arg Thr Ser Pro Arg  
                           5                          10                          15  
 Asp Asn Thr Leu Leu Gln Gln Lys Leu Leu Gln Gln Ala Tyr Met Thr  
                           20                          25                          30  
 Pro Lys Asp Asp Ile Arg Leu Val Gly Gln Leu Val Thr Val Ile Gly  
                           35                          40                          45  
 Ala Ile Ile Ile Leu Leu Val  
                           50                          55

<210> 769  
 <211> 39  
 <212> PRT  
 <213> Homo sapiens

<400> 769  
 Glu Val Pro Asp Ile Phe Arg Met Gly Val Thr Arg Phe Phe Gly Gln  
                           5                          10                          15  
 Thr Ile Leu Gly Gly Pro Phe His Val Leu Ile Ile Thr Tyr Ala Phe  
                           20                          25                          30  
 Met Val Leu Val Thr Met Val  
                           35

<210> 770  
 <211> 19  
 <212> PRT  
 <213> Homo sapiens

<400> 770  
 Met Arg Leu Ile Ser Ala Ser Gly Glu Val Val Pro Met Ser Phe Ala  
                           5                          10                          15  
 Leu Val Leu

<210> 771  
 <211> 52  
 <212> PRT  
 <213> Homo sapiens

<400> 771  
 Gly Trp Cys Asn Val Met Tyr Phe Ala Arg Gly Phe Gln Met Leu Gly  
                           5                          10                          15  
 Pro Phe Thr Ile Met Ile Gln Lys Met Ile Phe Gly Asp Leu Met Arg



306

20	25	30
Phe Cys Trp Leu Met Ala Val Val Ile Leu Gly Phe Ala Ser Ala Phe		
35	40	45
Tyr Ile Ile Phe		
50		
<210> 772		
<211> 213		
<212> PRT		
<213> Homo sapiens		
<400> 772		
Gln Thr Glu Asp Pro Glu Glu Leu Gly His Phe Tyr Asp Tyr Pro Met		
5	10	15
Ala Leu Phe Ser Thr Phe Glu Leu Phe Leu Thr Ile Ile Asp Gly Pro		
20	25	30
Ala Asn Tyr Asn Val Asp Leu Pro Phe Met Tyr Ser Ile Thr Tyr Ala		
35	40	45
Ala Phe Ala Ile Ile Ala Thr Leu Leu Met Leu Asn Leu Leu Ile Ala		
50	55	60
Met Met Gly Asp Thr His Trp Arg Val Ala His Glu Arg Asp Glu Leu		
65	70	75
Trp Arg Ala Gln Ile Val Ala Thr Thr Val Met Leu Glu Arg Lys Leu		
85	90	95
Pro Arg Cys Leu Trp Pro Arg Ser Gly Ile Cys Gly Arg Glu Tyr Gly		
100	105	110
Leu Gly Asp Arg Trp Phe Leu Arg Val Glu Asp Arg Gln Asp Leu Asn		
115	120	125
Arg Gln Arg Ile Gln Arg Tyr Ala Gln Ala Phe His Thr Arg Gly Ser		
130	135	140
Glu Asp Leu Asp Lys Asp Ser Val Glu Lys Leu Glu Leu Gly Cys Pro		
145	150	155
Phe Ser Pro His Leu Ser Leu Pro Met Pro Ser Val Ser Arg Ser Thr		
165	170	175
Ser Arg Ser Ser Ala Asn Trp Glu Arg Leu Arg Gln Gly Thr Leu Arg		
180	185	190
Arg Asp Leu Arg Gly Ile Ile Asn Arg Gly Leu Glu Asp Gly Glu Ser		
195	200	205
Trp Glu Tyr Gln Ile		
210		

<210> 773  
 <211> 1302  
 <212> DNA  
 <213> Homo sapiens

<400> 773  
 tggacaaagg gggtcacaca ttccctccat acgggtgagc ctctacctgc ctggtgctgg 60  
 tccacagttca gcttcttctt gatgggtggat cccaatggca atgaatccag tctacatcac 120  
 ttccatcccaa taggcctccc tggtttagaa gaggtccagt tctgggtgga ctteccattg 180  
 tgcctccctct accttattgc tgtgctaggt aacttgacaa tcatctacat tgtgoggset 240  
 gagcacagcc tgcctgagcc catgtatata ttcttttgca tgccttcagg cattgacatc 300  
 ctccatctcca cctcatccat gcccaaaatg ctggccatct tctgggttcaa ttccactacc 360  
 atccagtttg atgcttgtct gctacagatg ttggccatcc actccttata tggcatggaa 420  
 teccagctgc tgcctggccat ggtttttgac cgtatgtgtg ccctctgtca cccactgccc 480  
 catgcccacag tacttaagtt gctctgtgtc aaaaaattg gtgtggctgc tgtggtgctg 540  
 ggggtctgac tgatggcacc ccttccctgt ttcataagc agctgcccct ctgcccctcc 600  
 aatatccctt cccatttcta ctgctacac caagatgtca tgaagctggc ctgtgatgat 660  
 atccgggtca atgtgtctta tggccttata gtcctcatct ccgccattgg cctggactca 720  
 cttctctctt ccttctcata tctgcttatt cttaagactg tgttgggctt gacacgtgaa 780  
 gccacggcca aggcatttgg caettgctgc tctcatgtgt gtgtgtgtt catattctat 840  
 gtacctttca ttgattgtc catggtgcat cgttttagca agcggcgtga ctctccctgt 900  
 cccgtcatct tggccaatat ctatctgtgt gtctccctgt ttttccatgt ggccacacac 1020  
 ggagtgaaga caaaggagat tgcacagccc atctctcgar ttttccatgt ggccacacac 1080  
 gcttcagagc cctaggtgtc agtgatcaaa ctctcttctc attccagatc ctctgattca 1140  
 gatttttaag ttaacatttt ggaagacagt attcagaaaa aaaatttctt taataaaaaa 1200  
 acaactcaga tcttccaaat atgaacctgg ttgggggaat tccatttttt caattattat 1260  
 ttcttctttg tttcttctgt acatataatt attaatcccc tgaactaggt gtggtttgag 1302  
 gggtattact tttcatttta ccctgcagtc caaatctaaa ct

<210> 774  
 <211> 2061  
 <212> DNA  
 <213> Homo sapiens

<400> 774  
 acgattcgac agcgcacccct tgcacttttc catgtggcca caccgccttc agagccctag 60  
 gtgtcagtgga tcaaaattct tttccattca ggtgctctgt attcagattt taatgttaac 120  
 atttttgaag acagtatttca gaaaaaaat ttcccttaata aaaatataac tcagatccct 180  
 caaatatgaa actggttggg gaattctccat ttittcaata ttattttctt ctttgttttc 240  
 ttgtacata taattattaa taccctgact aggttgttgt tggagggtta ttacttttca 300  
 tttaaccatg cagtccaaat cttaactgct tctactgatg gtttacagca ttctgagata 360  
 agaatggtag atctagagaa catttgccaa aggcctaagc accgcaaggg aaattaaaca 420  
 cagaatataa taaaatgaga taatctagct taaaaactata acttctctt cagaactccc 480  
 aaccacattg gatctcagaa aaatgctgtc ttcaaaatga ctctacaga gaagaataa 540  
 ttttctctct ggacactagc acttaagggg aagattggaa gtaaaagcctt gaaaagagta 600  
 catttaacta cgttaatgaa agttgacaca ctgttctgag agttttcaca gcataaggac 660  
 cctgtttttt ctatttaatt ttcttatcaa ccctttaatt aggcacagat attattagta 720  
 cctcatttgt agccatggga aaattgatgt tcagtgggga tcaagtgaat aaatggggtc 780  
 atacaagtat aaaaattaaa aaaaaaggac ttcatgccc atctcatatg atgtggaaga 840  
 actgttagag agaccaacag ggtagtgggt tagagatttc cagagtctta cattttctag 900  
 aggaggtatt taattttctt tcaactatcc agtgtgtgat ttaggaattt cctggcaca 960  
 gaactcatgg ctttaatccc actagctatt gcttattgtc ctggtccaat tgccattac 1020  
 ctgtgtattg gaagaagtga ttcttaggt caccattatg gaagattctt attcagaag 1080  
 tctgcatagg gtttatagca agttatttat ttttaaaagt tccataggtg attctgatg 1140  
 gcagtgaagt tagggagcca ccagttatga tgggaagtat ggaatggcag gtcttgaaga 1200  
 taacattggc cttttgagtg tgaactgtag ctggaaagt agggaaatct caggaccatg 1260  
 ctttatttgg ggttttgtgc agtatgaaac agggactctg agaccaggaa agcaatctga 1320

```

cttaggcacg ggaatcagge atttttgctt ctgagggggt attaocaaagg gttaatagg 1380
ttcatcttca acaggatatg acaacagtg taaocaaagaa actcaaatta caaataactaa 1440
aacatgtgat catatatgtg gtaagtttca ttttcttttt caatcctcag gttccctgat 1500
atggattcct ataacatget ttcacccct tttgtaaatgg atatcatatt tggaaatgcc 1560
tatttaatac ttgtattttg tgetggactg taagcccatg agggcactgt ttattattga 1620
atgtcatctc tgttcatcat tgactgctct ttgctcatca ttgaatcccc cagcaaatgt 1680
cctagaacat aatagtgtct atgcttgaca ccggttattt ttcateaaac ctgattcctt 1740
ctgtcctgaa cacatagcca ggcattttc cagccttctt tgagttgggt attattaaat 1800
tctggccatt acttccaatg tgagtggag tgacatgtgc aatttctata cctggctcat 1860
aaaacccctc caatgtgcag ctttcatgtt gacattaaat gtgacttggg aagctatgtg 1920
ttacacagag taaatcacca gaagcctgga tttctgaaaa aactgtgcag agccaaacct 1980
ctgtcatttg caactccac ttgtatttgt acgaggcagt tggataagtg aaaaataaag 2040
tactattgtg tcaagtctct g

```

&lt;210&gt; 775

&lt;211&gt; 957

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 775

```

atgatggtag atcccaatgg caatgaatcc agtgtacat acttcatcct aataggcctc 60
cctggtttag aagaggctca gttctggttg gocttcccat tgtgtccct ctacctatt 120
gctgtgctag gtaacttgac aatcatctac attgtgcgga ctgagcacag cctgcatgag 180
cccattgata tttttctttg catgctttca ggcattgaca tctcatctc cactcatcc 240
atgccaaaa tgetggccat cttctggttc aattccacta ccatccagtt tgatgcttgt 300
ctgtacaga tgtttgccat ccactcctta tctggcatgg aatccacagt gctgctggcc 360
atggcttttg accgtatgt ggcactctgt caccacactgc gccatgccac agtacttacg 420
ttgctcgtg tcacaaaaat tgggtgggt gctgtggtgc ggggggctgc actgatggca 480
cccttctctg tcttcatcaa gcagctgccc ttctgcogct ccaatatact ttcccattcc 540
tactgctac accaagatgt catgaagctg goctgtgatg atatccgggt caatgtctgc 600
tatggcctta tctcatcat ctccgccatt ggcctggact caattctcat ctcttctca 660
tatctgctta ttcttaagac tgtgttgggc ttgacacgtg aagcccagga caaggcattt 720
ggcacttgcc tctctcatgt gtgtgctgtg ttcataattct atgtaccttt cattggattg 780
tccatggtag atcgttttag caagcggcgt gactctccgc tgcctgtcat cttggccaat 840
atcagacagc gcactcctcg acttttccat gtggccacac acgcttcaga gccctag 957

```

&lt;210&gt; 776

&lt;211&gt; 954

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 776

```

atgatggtag atcccaatgg caatgaatcc agtgtacat acttcatcct aataggcctc 60
cctggtttag aagaggctca gttctggttg gocttcccat tgtgtccct ctacctatt 120
gctgtgctag gtaacttgac aatcatctac attgtgcgga ctgagcacag cctgcatgag 180
cccattgata tttttctttg catgctttca ggcattgaca tctcatctc cactcatcc 240
atgccaaaa tgetggccat cttctggttc aattccacta ccatccagtt tgatgcttgt 300
ctgtacaga tgtttgccat ccactcctta tctggcatgg aatccacagt gctgctggcc 360
atggcttttg accgtatgt ggcactctgt caccacactgc gccatgccac agtacttacg 420
ttgctcgtg tcacaaaaat tgggtgggt gctgtggtgc ggggggctgc actgatggca 480
cccttctctg tcttcatcaa gcagctgccc ttctgcogct ccaatatact ttcccattcc 540
tactgctac accaagatgt catgaagctg goctgtgatg atatccgggt caatgtctgc 600
tatggcctta tctcatcat ctccgccatt ggcctggact caattctcat ctcttctca 660
tatctgctta ttcttaagac tgtgttgggc ttgacacgtg aagcccagga caaggcattt 720
ggcacttgcc tctctcatgt gtgtgctgtg ttcataattct atgtaccttt cattggattg 780
tccatggtag atcgttttag caagcggcgt gactctccgc tgcctgtcat cttggccaat 840

```

atctatatctgc tggttctctcc tgtgtctcaac ccaattgtct atgggagtga gacaaaggag 900  
atttcacacagc ccaatccttcc acttttccat gtggccacac accttcaga gcc 954

42103 777

<211> 338

212 ER3

<213> Homo sapiens

&lt;400&gt; 777

Met Met Val Asp Pro Asn Gly Asn Glu Ser Ser Ala Thr Tyr Phe Ile  
                8                    10               15

Leu Ile Gly Leu Pro Gly Leu Glu Glu Ala Gln Phe Trp Leu Ala Phe  
29 28 30

Pro Leu Cys Ser Leu Tyr Leu Ile Ala Val Leu Gly Asn Leu Thr Ile  
35 40 45

Ile Tyr Ile Val Arg Thr Glu His Ser Leu His Glu Pro Met Tyr Ile  
59 60

Phe Leu Cys Met Leu Ser Gly Ile Asp Ile Leu Ile Ser Thr Ser Ser  
 65 70 75 80

Met Pro Lys Met Leu Ala Ile Phe Trp Phe Asn Ser Thr Thr Ile Gln  
85 90 95

Phe Asp Ala Cys Leu Leu Gln Met Phe Ala Ile His Ser Leu Ser Gly  
100 105 110

Met Glu Ser Thr Val Leu Leu Ala Met Ala Phe Asp Arg Tyr Val Ala  
115 120 125

Ile Cys His Pro Leu Arg His Ala Thr Val Leu Thr Leu Pro Arg Val  
130 135 140

Thr Lys Ile Gly Val Ala Ala Val Val Arg Gly Ala Ala Leu Met Ala  
145 150 155 160

Pro Leu Pro Val Phe Ile Lys Gln Leu Pro Phe Cys Arg Ser Asn Ile  
165 170 175

Leu Ser His Ser Tyr Cys Leu His Gln Asp Val Met Lys Leu Ala Cys  
180 185 190

Asp Asp Ile Arg Val Asn Val Val Tyr Gly Leu Ile Val Ile Ile Ser  
195 200 205

Ala Ile Gly Leu Asp Ser Leu Leu Ile Ser Phe Ser Tyr Leu Leu Ile  
210 215 220

Leu Lys Thr Val Leu Gly Leu Thr Arg Glu Ala Gln Ala Lys Ala Phe  
225 230 235 240

Gly Thr Cys Val Ser His Val Cys Ala Val Phe Ile Phe Tyr Val Pro  
245 250 255

310

Phe Ile Gly Leu Ser Met Val His Arg Phe Ser Lys Arg Arg Asp Ser  
260 265 270

Pro Leu Pro Val Ile Leu Ala Asn Ile Tyr Leu Leu Val Pro Pro Val  
275 280 285

Leu Asn Pro Ile Val Tyr Gly Val Lys Thr Lys Glu Ile Arg Gln Arg  
290 295 300

Ile Leu Arg Leu Phe His Val Ala Thr His Ala Ser Glu Pro  
305 310 315

&lt;210&gt; 778

&lt;211&gt; 28

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 778

Met Met Val Asp Pro Asn Gly Asn Glu Ser Ser Ala Thr Tyr Phe Ile  
5 10 15

Leu Ile Gly Leu Pro Gly Leu Glu Glu Ala Gln Phe  
20 25

&lt;210&gt; 779

&lt;211&gt; 9

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 779

Arg Thr Glu His Ser Leu His Glu Pro  
5

&lt;210&gt; 780

&lt;211&gt; 21

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 780

Lys Met Leu Ala Ile Phe Trp Phe Asn Ser Thr Thr Ile Gln Phe Asp  
5 10 15

Ala Cys Leu Leu Gln  
20

&lt;210&gt; 781

&lt;211&gt; 20

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 781

Asp Arg Tyr Val Ala Ile Cys His Pro Leu Arg His Ala Thr Val Leu  
5 10 15

311

Thr Leu Pro Arg  
20

<210> 782  
<211> 37  
<212> PRT  
<213> Homo sapiens

<400> 782  
Phe Ile Lys Gln Leu Pro Phe Cys Arg Ser Asn Ile Leu Ser His Ser  
5 10 15

Tyr Cys Leu His Gln Asp Val Met Lys Leu Ala Cys Asp Asp Ile Arg  
20 25 30

Val Asn Val Val Tyr  
35

<210> 783  
<211> 13  
<212> PRT  
<213> Homo sapiens

<400> 783  
Lys Thr Val Leu Gly Leu Thr Arg Glu Ala Gln Ala Lys  
5 10

<210> 784  
<211> 10  
<212> PRT  
<213> Homo sapiens

<400> 784  
Val His Arg Phe Ser Lys Arg Arg Asp Ser  
5 10

<210> 785  
<211> 22  
<212> PRT  
<213> Homo sapiens

<400> 785  
Lys Thr Lys Glu Ile Arg Gln Arg Ile Leu Arg Leu Phe His Val Ala  
5 10 15

Thr His Ala Ser Glu Pro  
20

<210> 786  
<211> 3245  
<212> DNA  
<213> Homo sapiens

&lt;400&gt; 786

```

gtcgaccacac ggcgtccgggc gagctaagaa ggaggcggag ggggaggcgg agggcgaggg 60
ggggggagcg ccgcctggag cgcggcagggt catattgaac attccagata cctatcatta 120
ctcgatgctg ttgataacag caagatggct ttgaactcag ggtcaccacc agctattgga 180
ccttactatg aaaaaccatgg ataccaccgg gaaaaccctt atcccgaca gccactgtg 240
gtccccactg tctacgaggt gcatccggct cagtaactac cgtcccccgt gcccagtag 300
gccccgaggg tctgaagca ggtttccaa cccgtcgtct gcacgcagcc caastcccc 360
tcggggacag tctgaacctc aaagactaag aaagcactgt gcatcacctt gacccctggg 420
accttctcgt tgggagctgc gctggcggct ggctactctt ggaagttcat gggcagcaag 480
tgttccaaat ctgggataga gtgcgactcc tcaggtaact gcatcaacc ctttaactgg 540
tgtgatggcg tgtcacactg ccccgggcg tctcagagga agtctctgga cctgtgtgc 600
ggatcaaaat tcatccttca ggtgtactca tctcagagga agtctctgga cctgtgtgc 660
caagacgact ggaacgagaa ctacggggcg gggcctgca gggacatggg ctataagaat 720
aatttttact ctagccaaag aatagtggat gacagcggat ccaaccagct tatgaaactg 780
aacacaagtg ccggcaatgt cgtatcttat aaaaaactgt accacagtga tgcctgttct 840
tcaaaagcag tggttttctt acgctgtata gctcggggg tcaacttgaa ctcaagccgc 900
cagagcagga ttgtggggcg cgagagcgcg ctcccggggg cctggccctg gcaggtcagc 960
ctgcacgtcc agaacgtcca cgtgtgcgga ggtcccatca tcacccccga gtggatcgtg 1020
acagccggcc actgcgtgga aaaaacctct aacaatccat ggcattggac ggcatttgcg 1080
gggattttga gacastcttt catgtttctat ggagccggat accaagtaga aaagtgtatt 1140
tctcatccaa attatgaact caagaaccaag acaatgaca ttgcctgat gaagctgcag 1200
aagcctctga ctttcaacga cctagtgaac ccagtgtgtc tgcccaacc aggcattgat 1260
ctgcagccag aacagctctg ctggatttcc ggttgggggg ccaccgagga gaaggggag 1320
acctcagaag tgcgaaagc tgccaaaggt ctctcattg agacacagag atgcaacagc 1380
agatatgtct atgacaaact gatcacacca gccatgatct gtgcgggctt cctgcagggg 1440
aacgtcgatt ctgcccaggg tgacagtggg gggcctctgg tcaettcgaa gaacaatc 1500
tggtggctga taggggatac aagctggggg tctggctgtg ccaaaagctt cagaccagga 1560
gtgtacggga atgtgatggg attcaaggac tggatttate gacaaatgag ggcagacggc 1620
taatccacat ggtctctctc cttgacgtcg ttttacaaga aaacaatggg gctgggtttg 1680
cttccocgtg catgatttca tcttagagat gattcagagg tcacttcatt tttattaaac 1740
agtgaacttg tctggctttg gcactctctg ccattctgtg caggctgcag tggctccct 1800
gccagccctg ctctccctaa ccccttctgc gcaaggggtg atggccggct ggttgtgggc 1860
actggcggtc aagtgtggag gagaggggtg gaggtgcac cattgagatc ttctgctga 1920
gtcctttcca ggggcnaatt ttgatgagc atggagctgt cactctcag ctgctggatg 1980
acttgagatg aaaaaggaga gacatggaaa ggggagacgc caggtggcac ctgcagggc 2040
tgccctctcg ggcacttg agccttccc cagccctgga tgggtggccag aataaaaggg accagccct 2100
atgggttctt agagccttag cagccctgga tgggtggccag aataaaaggg accagccct 2160
catgggtgtg gacgtggtag tcaattgtaa ggggaacaga aacatttttg ttcttatggg 2220
gtgagaatat agacagtgc cttggtgaga ggggaagcaat tgaagggaa cttgccctga 2280
gcactcctcg tgcaggtctc cactgcaca ttgggtgggg ctctggggag ggagactcag 2340
ccttctctct catctcctt gacccctgct ctagcacctt ggagagtga catgcctt 2400
ggtcctggca gggcgccaag tctggcaca tctgggctc ttcaggcctg ctagtcactg 2460
gaaattgagg tccatggggg aatcaagga tgcctcagttt aaggtacact gtttccatgt 2520
tatgtttcta cacattgcta cctcagtgct cctggaacct tagcttttga tgtctocaa 2580
tagtccacct tcatttaact ctttgaacct gtatcatctt tgccaagtaa gagtgtggc 2640
ctatttcagc tgccttgaca aaatgactgg cctcagctt aacgttctat aaatgaatgt 2700
cctgaagcaa agtgcacctg gtggcgggca agagagaaa gatgtgttt gttttggact 2760
ctctgtggtc ccttccaatg ctgtgggttt ccaaccaggg gaagggtccc ttttgcattg 2820
ccaagtgcra taaccatgag cactactcta ccatggttct gctcctggc caagcaggt 2880
ggtttgcaag aatgaatga atgattctac agctaggact taaccttga atggaagtc 2940
ttgcaatccc atttgacaga tccgtctgtg cacatgcctc tglagagagc agcattccca 3000
gggaccttgg aaacagttgg cactgtaaag tcttgetoc ccaagacaca tcttaaaagg 3060
tgttgtaatg gtgaasagc cttccttctt tattgcccc tcttatttat gtgaacaa 3120
gtttgtcttt ttttgtatct tttttaaact gtaaaagttca attgtgaaaa tgaatatac 3180
gcaataaast tatgcgattt ttttttcaaa gtaaaaaaaa aaaaaaaa aaaaagggcg 3240
gcgcg

```

<210> 787  
 <211> 1479  
 <212> DNA  
 <213> Homo sapiens

<400> 787  
 atggctttga actcagggtc accaccagct attggacott actatgaaa ccatggatac 60  
 caacoggaaa acccctatcc cgcacagccc actgtggtcc ccactgtcta cgagggtgat 120  
 ccggctcagt actaccgttc ccccgtagcc cagtaagccc cgagggtcct gacgcaggct 180  
 tocaaccccg tcgtctgcac gcagcccaaa tcccctccg ggacagtgtg caactcaaaag 240  
 actaagaaag cactgtgcac cactttgacc ctggggacct tccctgtggg agctgcgctg 300  
 gccgtggcc tactctggaa gttcatgggc agcaagtgtt ccaactctgg gatagagtgc 360  
 gactcctcag gtacctgcat caaccctctt aactggtgtg atggcgtgtc acactgcccc 420  
 ggcggggagg acgagaatcg gtgtgttcgc ctctacggat caaacttcat ccttcagggtg 480  
 tactcatctc agaggaagtc ctggcacccct gtgtgccaag acgactggaa cgagaactac 540  
 gggcggggcg cctgcaggga catgggctat aagaataatt tttactctag ccaagggaata 600  
 gtggatgaca gcggatccac cagctttatg aaactgaaca caagtgcggg caatgtcgat 660  
 atctataaaa aactgtacca cagtgtatgc tgttcttcaa aagcagtggg ttctttacgc 720  
 tgtatagcct gcgggggtcaa cttgaactca agccgccaga gcaggattgt gggcggcgag 780  
 agcgcgctcc cgggggctg gccctggcag gtcagcctgc acgtccagaa cgtccacgtg 840  
 tgcggagggt ccactatcac ccccgagtgg atcgtgacag ccgccactg cgtggaaaaa 900  
 cctcttaaca atccatggca ttggaaggca tttgaggaga ttttgagaca atctttcatg 960  
 ttctatggag ccggatacca agtagaaaaa gtgatttctc atccaaatta tgactccaag 1020  
 accaagaaca atgacattgc gctgatgaag ctgcagaagc ctctgacttt caacgaacta 1080  
 gtgaaccag tgtgtctgcc caaccaggc atgatgtctc agccagaaca gctctgctgg 1140  
 atttcgggtt ggggggcac ccaggagaaa gggagagcct cagaagtgtt gaacgtgcc 1200  
 aagggtgctt cacttgagac acagagatgc aacagcagat atgtctatga caactgtatc 1260  
 acaccagcca tgatctgtgc cggcttcttg caggggaacg togattcttg ccagggtgac 1320  
 agtggagggc ctctggtcac ttogaagaac aatctctgtt ggcctgatag ggatacaagc 1380  
 tgggtttctg gctgtgccaa agcttacaga ccaggagtgt acgggaatgt gatggtattc 1440  
 accgactgga tttatogaca aatgagggca gaaggctaa 1479

<210> 788  
 <211> 1476  
 <212> DNA  
 <213> Homo sapiens

<400> 788  
 atggctttga actcagggtc accaccagct attggacott actatgaaa ccatggatac 60  
 caacoggaaa acccctatcc cgcacagccc actgtggtcc ccactgtcta cgagggtgat 120  
 ccggctcagt actaccgttc ccccgtagcc cagtaagccc cgagggtcct gacgcaggct 180  
 tocaaccccg tcgtctgcac gcagcccaaa tcccctccg ggacagtgtg caactcaaaag 240  
 actaagaaaag cactgtgcac cactttgacc ctggggacct tccctgtggg agctgcgctg 300  
 gccgtggcc tactctggaa gttcatgggc agcaagtgtt ccaactctgg gatagagtgc 360  
 gactcctcag gtacctgcat caaccctctt aactggtgtg atggcgtgtc acactgcccc 420  
 ggcggggagg acgagaatcg gtgtgttcgc ctctacggat caaacttcat ccttcagggtg 480  
 tactcatctc agaggaagtc ctggcacccct gtgtgccaag acgactggaa cgagaactac 540  
 gggcggggcg cctgcaggga catgggctat aagaataatt tttactctag ccaagggaata 600  
 gtggatgaca gcggatccac cagctttatg aaactgaaca caagtgcggg caatgtcgat 660  
 atctataaaa aactgtacca cagtgtatgc tgttcttcaa aagcagtggg ttctttacgc 720  
 tgtatagcct gcgggggtcaa cttgaactca agccgccaga gcaggattgt gggcggcgag 780  
 agcgcgctcc cgggggctg gccctggcag gtcagcctgc acgtccagaa cgtccacgtg 840  
 tgcggagggt ccactatcac ccccgagtgg atcgtgacag ccgccactg cgtggaaaaa 900  
 cctcttaaca atccatggca ttggaaggca tttgaggaga ttttgagaca atctttcatg 960  
 ttctatggag ccggatacca agtagaaaaa gtgatttctc atccaaatta tgactccaag 1020  
 accaagaaca atgacattgc gctgatgaag ctgcagaagc ctctgacttt caacgaacta 1080  
 gtgaaccag tgtgtctgcc caaccaggc atgatgtctc agccagaaca gctctgctgg 1140



```

atttcggggt gggggggccac cgaggagaaa gggaagacct cagaagtget gaacgctgcc 1200
aagggtgttc tcattgagac acagagatgc aacagcagat atgtctatga caacctgate 1260
acaccagcca tgatctgtgc cggcttctcg caggggaaag togattcttg ccagggtgac 1320
agtggaggggc ctctggtcac ttggagaaac aatatctggt ggctgatagg ggatacaagg 1380
tggggttctg gctgtgccaa agcttacaga ccaggagtgt acgggaatgt gatggtattc 1440
acggactgga tttatcgaca aatgagggca gacggc 1476

```

&lt;210&gt; 789

&lt;211&gt; 492

&lt;212&gt; FRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 789

```

Met Ala Leu Asn Ser Gly Ser Pro Pro Ala Ile Gly Pro Tyr Tyr Glu
      5      10      15
Asn His Gly Tyr Gln Pro Gln Asn Pro Tyr Pro Ala Gln Pro Thr Val
      20      25      30
Val Pro Thr Val Tyr Glu Val His Pro Ala Gln Tyr Tyr Pro Ser Pro
      35      40      45
Val Pro Gln Tyr Ala Pro Arg Val Leu Thr Gln Ala Ser Asn Pro Val
      50      55      60
Val Cys Thr Gln Pro Lys Ser Pro Ser Gly Thr Val Cys Thr Ser Lys
      65      70      75      80
Thr Lys Lys Ala Leu Cys Ile Thr Leu Thr Leu Gly Thr Phe Leu Val
      85      90      95
Gly Ala Ala Leu Ala Ala Gly Leu Leu Trp Lys Phe Met Gly Ser Lys
      100     105     110
Cys Ser Asn Ser Gly Ile Glu Cys Asp Ser Ser Gly Thr Cys Ile Asn
      115     120     125
Pro Ser Asp Trp Cys Asp Gly Val Ser His Cys Pro Gly Gly Glu Asp
      130     135     140
Glu Asn Arg Cys Val Arg Leu Tyr Gly Ser Asn Phe Ile Leu Gln Val
      145     150     155     160
Tyr Ser Ser Gln Arg Lys Ser Trp His Pro Val Cys Gln Asp Asp Trp
      165     170     175
Asn Glu Asn Tyr Gly Arg Ala Ala Cys Arg Asp Met Gly Tyr Lys Asn
      180     185     190
Asn Phe Tyr Ser Ser Gln Gly Ile Val Asp Asp Ser Gly Ser Thr Ser
      195     200     205
Phe Met Lys Leu Asn Thr Ser Ala Gly Asn Val Asp Ile Tyr Lys Lys
      210     215     220
Leu Tyr His Ser Asp Ala Cys Ser Ser Lys Ala Val Val Ser Leu Arg
      225     230     235     240
Cys Ile Ala Cys Gly Val Asn Leu Asn Ser Ser Arg Gln Ser Arg Ile
      245     250     255
Val Gly Gly Glu Ser Ala Leu Pro Gly Ala Trp Pro Trp Gln Val Ser
      260     265     270
Leu His Val Gln Asn Val His Val Cys Gly Gly Ser Ile Ile Thr Pro
      275     280     285
Glu Trp Ile Val Thr Ala Ala His Cys Val Glu Lys Pro Leu Asn Asn
      290     295     300
Pro Trp His Trp Thr Ala Phe Ala Gly Ile Leu Arg Gln Ser Phe Met
      305     310     315     320
Phe Tyr Gly Ala Gly Tyr Gln Val Glu Lys Val Ile Ser His Pro Asn
      325     330     335
Tyr Asp Ser Lys Thr Lys Asn Asn Asp Ile Ala Leu Met Lys Leu Gln
      340     345     350

```

Lys Pro Leu Thr Phe Asn Asp Leu Val Lys Pro Val Cys Leu Pro Asn  
 355 360 365  
 Pro Gly Met Met Leu Gln Pro Glu Gln Leu Cys Trp Ile Ser Gly Trp  
 370 375 380  
 Gly Ala Thr Glu Glu Lys Gly Lys Thr Ser Glu Val Leu Asn Ala Ala  
 385 390 395 400  
 Lys Val Leu Leu Ile Glu Thr Gln Arg Cys Asn Ser Arg Tyr Val Tyr  
 405 410 415  
 Asp Asn Leu Ile Thr Pro Ala Met Ile Cys Ala Gly Phe Leu Gln Gly  
 420 425 430  
 Asn Val Asp Ser Cys Gln Gly Asp Ser Gly Gly Pro Leu Val Thr Ser  
 435 440 445  
 Lys Asn Asn Ile Trp Trp Leu Ile Gly Asp Thr Ser Trp Gly Ser Gly  
 450 455 460  
 Cys Ala Lys Ala Tyr Arg Pro Gly Val Tyr Gly Asn Val Met Val Phe  
 465 470 475 480  
 Thr Asp Trp Ile Tyr Arg Gln Met Arg Ala Asp Gly  
 485 490

<210> 790  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

<400> 790  
 Met Ala Leu Asn Ser Gly Ser Pro Pro Ala Ile Gly Pro Tyr Tyr Glu  
 5 10 15  
 Asn His Gly Tyr Gln Pro Glu Asn Pro Tyr Pro Ala Gln Pro Thr Val  
 20 25 30  
 Val Pro Thr Val Tyr Glu Val His Pro Ala Gln Tyr Tyr Pro Ser Pro  
 35 40 45  
 Val Pro Gln Tyr Ala Pro Arg Val Leu Thr Gln Ala Ser Asn Pro Val  
 50 55 60  
 Val Cys Thr Gln Pro Lys Ser Pro Ser Gly Thr Val Cys Thr Ser Lys  
 65 70 75 80  
 Thr Lys Lys Ala Leu Cys Ile Thr Leu Thr Leu Gly Thr Phe Leu Val  
 85 90 95  
 Gly Ala Ala Leu  
 100

<210> 791  
 <211> 393  
 <212> PRT  
 <213> Homo sapiens

<400> 791  
 Leu Ala Ala Gly Leu Leu Trp Lys Phe Met Gly Ser Lys Cys Ser Asn  
 5 10 15  
 Ser Gly Ile Gln Cys Asp Ser Ser Gly Thr Cys Ile Asn Pro Ser Asn  
 20 25 30  
 Trp Cys Asp Gly Val Ser His Cys Pro Gly Gly Glu Asp Glu Asn Arg  
 35 40 45  
 Cys Val Arg Leu Tyr Gly Ser Asn Phe Ile Leu Gln Val Tyr Ser Ser  
 50 55 60  
 Gln Arg Lys Ser Trp His Pro Val Cys Gln Asp Asp Trp Asn Glu Asn  
 65 70 75 80

316

Tyr Gly Arg Ala Ala Cys Arg Asp Met Gly Tyr Lys Asn Asn Phe Tyr  
                     85                    90                    95  
 Ser Ser Gln Gly Ile Val Asp Asp Ser Gly Ser Thr Ser Phe Met Lys  
                     100                    105                    110  
 Leu Asn Thr Ser Ala Gly Asn Val Asp Ile Tyr Lys Lys Leu Tyr His  
                     115                    120                    125  
 Ser Asp Ala Cys Ser Ser Lys Ala Val Val Ser Leu Arg Cys Ile Ala  
                     130                    135                    140  
 Cys Gly Val Asn Leu Asn Ser Ser Arg Gln Ser Arg Ile Val Gly Gly  
                     145                    150                    155                    160  
 Glu Ser Ala Leu Pro Gly Ala Trp Pro Trp Gln Val Ser Leu His Val  
                     165                    170                    175  
 Gln Asn Val His Val Cys Gly Gly Ser Ile Ile Thr Pro Glu Trp Ile  
                     180                    185                    190  
 Val Thr Ala Ala His Cys Val Glu Lys Pro Leu Asn Asn Pro Trp His  
                     195                    200                    205  
 Trp Thr Ala Phe Ala Gly Ile Leu Arg Gln Ser Phe Met Phe Tyr Gly  
                     210                    215                    220  
 Ala Gly Tyr Gln Val Glu Lys Val Ile Ser His Pro Asn Tyr Asp Ser  
                     225                    230                    235                    240  
 Lys Thr Lys Asn Asn Asp Ile Ala Leu Met Lys Leu Gln Lys Pro Leu  
                     245                    250                    255  
 Thr Phe Asn Asp Leu Val Lys Pro Val Cys Leu Pro Asn Pro Gly Met  
                     260                    265                    270  
 Met Leu Gln Pro Glu Gln Leu Cys Trp Ile Ser Gly Trp Gly Ala Thr  
                     275                    280                    285  
 Glu Glu Lys Gly Lys Thr Ser Glu Val Leu Asn Ala Ala Lys Val Leu  
                     290                    295                    300  
 Leu Ile Glu Thr Gln Arg Cys Asn Ser Arg Tyr Val Tyr Asp Asn Leu  
                     305                    310                    315                    320  
 Ile Thr Pro Ala Met Ile Cys Ala Gly Phe Leu Gln Gly Asn Val Asp  
                     325                    330                    335  
 Ser Cys Gln Gly Asp Ser Gly Gly Pro Leu Val Thr Ser Lys Asn Asn  
                     340                    345                    350  
 Ile Trp Trp Leu Ile Gly Asp Thr Ser Trp Gly Ser Gly Cys Ala Lys  
                     355                    360                    365  
 Ala Tyr Arg Pro Gly Val Tyr Gly Asn Val Met Val Phe Thr Asp Trp  
                     370                    375                    380  
 Ile Tyr Arg Gln Met Arg Ala Asp Gly  
                     385                    390

&lt;210&gt; 792

&lt;211&gt; 595

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 792

Met Ser Phe Leu Asn Phe Thr Ala Val Leu Phe Ala Ala Ser Ser Ala  
                     1                    5                    10                    15  
 Leu Ala Ala Pro Val Asn Thr Thr Thr Glu Asp Glu Thr Ala Gln Ile  
                     20                    25                    30  
 Pro Ala Glu Ala Val Ile Gly Tyr Ser Asp Leu Glu Gly Asp Phe Asp  
                     35                    40                    45  
 Val Ala Val Leu Pro Phe Ser Asn Ser Thr Asn Asn Gly Leu Leu Phe  
                     50                    55                    60  
 Ile Asn Thr Thr Ile Ala Ser Ile Ala Ala Lys Glu Glu Gly Val Ser  
                     65                    70                    75                    80

Leu	Glu	Lys	Arg	Glu	Ala	Glu	Ala	Met	Val	Leu	Gly	Ile	Gly	Pro	Val		
				85					90					95			
Leu	Gly	Leu	Val	Cys	Val	Pro	Leu	Leu	Gly	Ser	Ala	Ser	Asp	His	Trp		
			100					105					110				
Arg	Gly	Arg	Tyr	Gly	Arg	Arg	Arg	Pro	Phe	Ile	Trp	Ala	Leu	Ser	Leu		
			115				120						125				
Gly	Ile	Leu	Leu	Ser	Leu	Phe	Leu	Ile	Pro	Arg	Ala	Gly	Trp	Leu	Ala		
	130					135					140						
Gly	Leu	Leu	Cys	Pro	Asp	Pro	Arg	Pro	Leu	Glu	Leu	Ala	Leu	Leu	Ile		
	145				150				155						160		
Leu	Gly	Val	Gly	Leu	Leu	Asp	Phe	Cys	Gly	Gln	Val	Cys	Phe	Thr	Pro		
			165					170						175			
Leu	Glu	Ala	Leu	Leu	Ser	Asp	Leu	Phe	Arg	Asp	Pro	Asp	His	Cys	Arg		
			180					185					190				
Gln	Ala	Tyr	Ser	Val	Tyr	Ala	Phe	Met	Ile	Ser	Leu	Gly	Gly	Cys	Leu		
	195						200					205					
Gly	Tyr	Leu	Leu	Pro	Ala	Ile	Asp	Trp	Asp	Thr	Ser	Ala	Leu	Ala	Pro		
	210					215						220					
Tyr	Leu	Gly	Thr	Gln	Glu	Glu	Cys	Leu	Phe	Gly	Leu	Leu	Thr	Leu	Ile		
	225				230					235					240		
Phe	Leu	Thr	Cys	Val	Ala	Ala	Thr	Leu	Leu	Val	Ala	Glu	Glu	Ala	Ala		
			245					250						255			
Leu	Gly	Pro	Thr	Glu	Pro	Ala	Glu	Gly	Leu	Ser	Ala	Pro	Ser	Leu	Ser		
			260				265						270				
Pro	His	Cys	Cys	Pro	Cys	Arg	Ala	Arg	Leu	Ala	Phe	Arg	Asn	Leu	Gly		
	275					280						285					
Ala	Leu	Leu	Pro	Arg	Leu	His	Gln	Leu	Cys	Cys	Arg	Met	Pro	Arg	Thr		
	290				295						300						
Leu	Arg	Arg	Leu	Phe	Val	Ala	Glu	Leu	Cys	Ser	Trp	Met	Ala	Leu	Met		
	305				310					315					320		
Thr	Phe	Thr	Leu	Phe	Tyr	Thr	Asp	Phe	Val	Gly	Glu	Gly	Leu	Tyr	Gln		
			325					330						335			
Gly	Val	Pro	Arg	Ala	Glu	Pro	Gly	Thr	Glu	Ala	Arg	Arg	His	Tyr	Asp		
			340				345						350				
Glu	Gly	Val	Arg	Met	Gly	Ser	Leu	Gly	Leu	Phe	Leu	Gln	Cys	Ala	Ile		
	355				360							365					
Ser	Leu	Val	Phe	Ser	Leu	Val	Met	Asp	Arg	Leu	Val	Gln	Arg	Phe	Gly		
	370				375						380						
Thr	Arg	Ala	Val	Tyr	Leu	Ala	Ser	Val	Ala	Ala	Phe	Pro	Val	Ala	Ala		
	385				390				395						400		
Gly	Ala	Thr	Cys	Leu	Ser	His	Ser	Val	Ala	Val	Val	Thr	Ala	Ser	Ala		
			405				410							415			
Ala	Leu	Thr	Gly	Phe	Thr	Phe	Ser	Ala	Leu	Gln	Ile	Leu	Pro	Tyr	Thr		
			420				425						430				
Leu	Ala	Ser	Leu	Tyr	His	Arg	Glu	Lys	Gln	Val	Phe	Leu	Pro	Lys	Tyr		
	435				440							445					
Arg	Gly	Asp	Thr	Gly	Gly	Ala	Ser	Ser	Glu	Asp	Ser	Leu	Met	Thr	Ser		
	450				455						460						
Phe	Leu	Pro	Gly	Pro	Lys	Pro	Gly	Ala	Pro	Phe	Pro	Asn	Gly	His	Val		
	465				470				475					480			
Gly	Ala	Gly	Gly	Ser	Gly	Leu	Leu	Pro	Pro	Pro	Pro	Ala	Leu	Cys	Gly		
			485					490						495			
Ala	Ser	Ala	Cys	Asp	Val	Ser	Val	Arg	Val	Val	Val	Gly	Glu	Pro	Thr		
			500				505						510				
Glu	Ala	Arg	Val	Val	Pro	Gly	Arg	Gly	Ile	Cys	Leu	Asp	Leu	Ala	Ile		
	515				520							525					
Leu	Asp	Ser	Ala	Phe	Leu	Leu	Ser	Gln	Val	Ala	Pro	Ser	Leu	Phe	Met		
	530				535						540						

[illegible]

**THIS PAGE BLANK (USPTO)**

**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

**BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ BLACK BORDERS
- ☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
- ☐ FADED TEXT OR DRAWING
- ☐ BLURRED OR ILLEGIBLE TEXT OR DRAWING
- ☐ SKEWED/SLANTED IMAGES
- ☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
- ☐ GRAY SCALE DOCUMENTS
- ☐ LINES OR MARKS ON ORIGINAL DOCUMENT
- ☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
- ☐ OTHER: \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.

**THIS PAGE BLANK (USPTO)**